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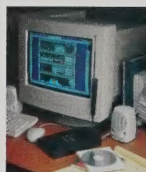
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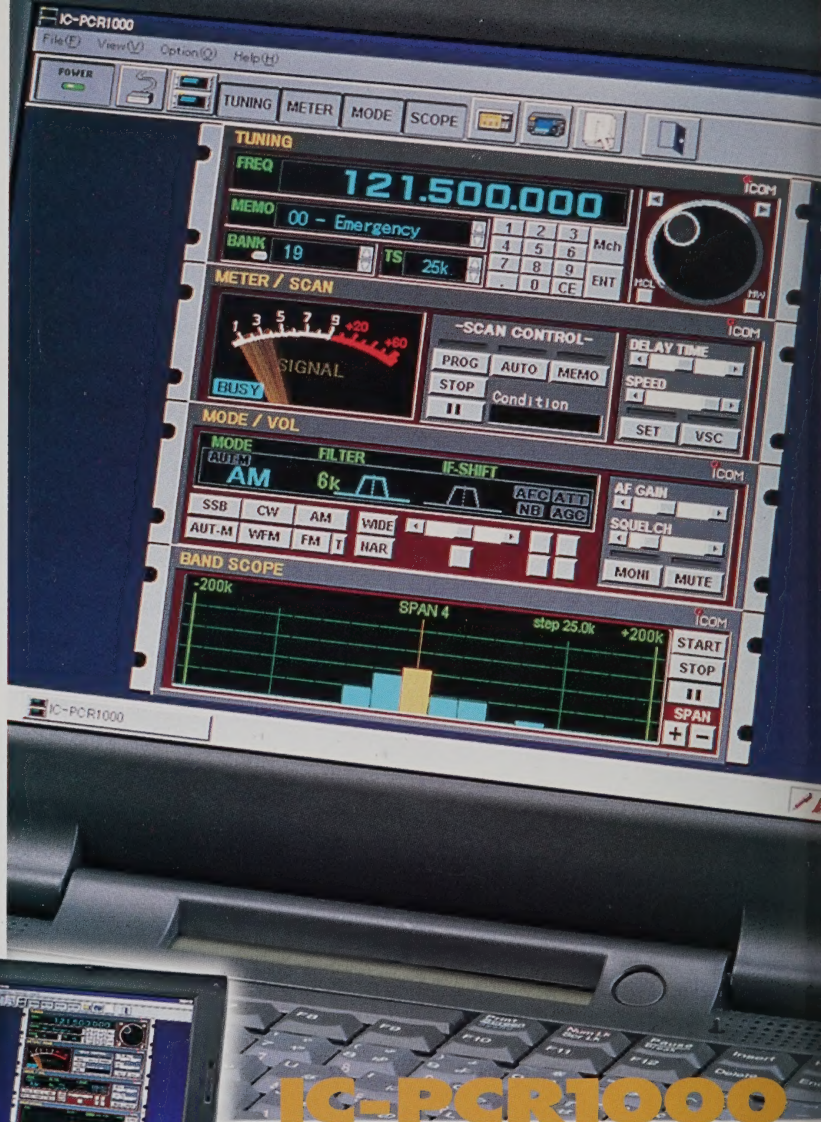
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ADI (ADI)

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AT-400	2.5w 440 FM HT/batt/cgr/TTP	214.95	159 ⁹⁵
AT-400HP	5w 440 FM HT/batt/cgr/TTP	234.95	199 ⁹⁵
AT-600	2.5w 2m/440 HT/batt/cgr/TTP	389.95	249 ⁹⁵
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276	Satellite Anthology 4th edition	12.00	
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RSGB PUBLICATION

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AIM (AIM)

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24-7739P	Coax stripper; RG-8/11/213	28.95	
37-503	6-socket surge/EMI/RFI filt	29.00	9 ⁹⁵
38-305	500ma 3/4, 5/6/7.5/9/12vdc adapter	9.95	
38-312	1.2A 1.5/3/4.5/6/7.5/9/12vdc adapt	29.95	
38-384	4A power supply, 5A surge	65.00	39 ⁹⁵
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EME-12 Headset w/earphone/mic/VOX	70.95
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EDC-36 Power cable w/filter	21.95
EDC-60 Quick charger	78.95
EDH-16 Dry cell battery case	10.95
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EME-12 Headset w/earphone/mic/VOX	70.95
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ESC-29 Soft case for EBP-37N	10.95
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EDH-18 12v to 5.5v DC/DC conv/cig plug	33.95
EME-6 Earphone	11.95
EME-13 Headset w/ear bud/mic/VOX	70.95
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EMS-9 Speaker/mic	44.95
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Extra arc-plug cartridge for R-T	12.95
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Extra arc-plug cartridge for HV	15.95
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Extra arc-plug cartridge for HV/N	15.95
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Delta-4/N 1.3 GHz 4-pos type N switch/protector	89.95
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105-T General Class QSO code course tape	5.95
106-T Extra Class QSO code course tape	5.95
107-PC-2 IBM Morse Code Course, version 2.0	29.95
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K-1 Bakelite type key	\$ 10.95
K-4 Brass type key	16.95

AMECO - continued

OCM-2K Code oscillator & CW monitor kit	\$19.95
OCM-2W Wired oscillator & CW monitor	24.95
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TPA Tunable preamp & indoor active ant	\$76.95
P-9T Power supply for TPA	9.95
PT-3 2-54 MHz transceiver preamp	124.95
P-12T Power supply for PT-3	9.95

DUMMY LOADS & FILTERS

DL-1500 1500w dummy load	\$59.95	39 ⁹⁵
DL-1500F 1500w dummy load w/fan	99.95	69 ⁹⁵
HP-75T 75 ohm high-pass filter	12.95	
HP-300T 300 ohm high-pass filter	12.95	

ARMSTRONG (AMR)

AL-80B 1kw PEP out linear (3-500Z)	1249.00	1149 ⁹⁵
AL-82 1.5kw PEP out linear (2 3-500Zs)	2195.00	1899 ⁹⁵
AL-572 1.25kw PEP out linear (4 572Bs)	1395.95	1249 ⁹⁵
AL-800 1250w PEP out linear (3CX800A7)	1595.00	1429 ⁹⁵
AL-800H 1.5kw PEP out amp (2 3CX800A7)	2295.00	2049 ⁹⁵
AL-811 600w PEP out linear (3 811As)	649.00	599 ⁹⁵
AL-811H 800w PEP out linear (4 811As)	799.00	729 ⁹⁵
AL-1200 1.5kw PEP out linear (3CX-1200A7)	2295.00	1969 ⁹⁵
AL-1500 1.5kw PEP out linear (8877)	2795.00	2399 ⁹⁵

ALS-500M 600w PEP out solid state mob amp	799.00	699 ⁹⁵
ALS-600 700w PEP out solid state amp w/ps	1299.00	1129 ⁹⁵

ARB-700 Amp Xcvr interface; Icom	39.95	29 ⁹⁵
ARB-702I Amplifier Xcvr interface; Icom	39.95	
ARB-702I2 Amp Xcvr interface; Ico 706&MKII	39.95	
ARB-702K Amplifier Xcvr interface; Kenwood	39.95	
ARB-702Y Amplifier Xcvr interface; Yaesu	39.95	
ATP-100 Amplifier tuning pulser	49.95	
ATP-102 Deluxe amplifier tuning pulser	59.95	
ATR-15 1.5kw antenna tuner	399.00	369 ⁹⁵

ADL-1500 1.5kw dummy load with oil	59.95	
ADL-2500 2.5kw dummy load with fan	199.95	189 ⁹⁵
ICP-120 120v inrush protector	79.95	
ICP-240 240v inrush protector	79.95	

QSK-5 Stand alone T/R switch	349.00	329 ⁹⁵
QSK-5PC PC board kit; T/R switch	249.00	229 ⁹⁵

CF-5 Cooling fan for QSK-5	39.95	
RCS-4 4-pos wireless remote coax switch	139.00	129 ⁹⁵
RCS-8V 160-2m 5-pos remote coax switch	149.00	139 ⁹⁵

Note: RCS-8V requires 8-wire control cable.

Antenna Specialists (ASP)

AP-143 2m on glass cellular look-alike ant	\$78.25	69 ⁹⁵
APR151.3 2m 3db on glass antenna	70.00	59 ⁹⁵
KAV-382 On glass replacement mtg kit	11.95	
ASC-37 Hole plug for 3/8" hole	2.25	99 ^c

Antennas America (ANA)

HVA-146 75w 2m disguised decal antenna	\$69.95	
HVA-460 75w 440 disguised decal antenna	69.95	

Antenna Supermarket (ANT)

Eavesdropper* 60-11m trap dipole SWL ant	\$79.95	
*Specify 50-239 or twin-lead		

SWL Sloper 120-11m SWL antenna	\$79.95	59 ⁹⁵
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ARROW Antenna (ARA)

146/437-10 3 el 2m/7 el UHF handheld beam	\$73.95	
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ARTSCI (ART)

Amateur Handbook	\$14.95	
Lost Users Manuals	19.95	
US Repeater 97 Mapbook 97/98 edition	9.95	
US Repeater CD-ROM info+US hams	29.95	14 ⁹⁵

ASTATIC (AST)

100A-L Dynamic mic head (no stand or cable)	\$69.99	
D-104-L Crystal mic head (no stand or cable)	42.99	
T-U69 Amplified desk stand	52.95	
Night Eagle Brass/black crystal desk mic	129.99	119 ⁹⁵
T-U69-D104 Amp mic, 6-wire w/stand	99.99	
T-UP9-D104-SE Silver Eagle 6-wire amp	129.99	119 ⁹⁵

ASTATIC - continued

MC-320 Crystal mic cartridge for D-104	19.99	
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ASTRON (ASR)

RS-4L 3A ps, 4A surge, w/cig lighter socket	\$57.95	49 ⁹⁵
RS-7A 5A power supply, 7A surge	68.95	59 ⁹⁵
RS-10A 7.5A power supply, 10A surge	85.95	69 ⁹⁵
RS-12A 9A power supply, 12A surge	99.95	79 ⁹⁵
RS-12S 9A ps, 12A surge, w/speaker	112.95	89 ⁹⁵
RS-20A 16A power supply, 20A surge	121.95	99 ⁹⁵
RS-35A 25A power supply, 35A surge	197.95	149 ⁹⁵
RS-35A/220V 220v 25A ps, 35A surge	217.75	169 ⁹⁵
RS-50A 37A power supply, 50A surge	285.95	219 ⁹⁵
RS-70A 57A power supply, 70A surge	339.95	259 ⁹⁵
RS-20M 16A ps w/meters, 20A surge	144.95	119 ⁹⁵
RS-35M 25A ps w/meters, 35A surge	204.95	169 ⁹⁵
RS-50M 37A ps w/meters, 50A surge	314.95	239 ⁹⁵
RS-70M 57A ps w/meters, 70A surge	372.95	289 ⁹⁵
VS-20ML Variable 16A ps/meters, 20A surge	170.95	139 ⁹⁵
VS-35M Variable 25A ps/meters, 35A surge	238.95	189 ⁹⁵
VS-50M Variable 37A ps/meters, 50A surge	330.95	259 ⁹⁵
RM-35M 25A rack mt ps/meters, 35A surge	318.95	249 ⁹⁵
RM-50M 37A rack mt ps/meters, 50A surge	354.95	279 ⁹⁵
RM-60M 50A rack mt ps/meters, 55A surge	467.95	359 ⁹⁵
SS-25 20A switching ps, 25A surge	161.95	129 ⁹⁵
SS-30 25A switching ps, 30A surge	186.95	149 ⁹⁵
SS-25M 20A switching ps/meters, 25A surge	186.95	149 ⁹⁵
SS-30M 25A switching ps/meters, 30A surge	212.90	169 ⁹⁵
12/115 200w solid state 12vdc-115vac inverter	86.95	69 ⁹⁵
2412 9A 22-32vdc to 13.8vdc converter	73.95	64 ⁹⁵
2412 16A 22-32vdc to 13.8vdc converter	103.95	89 ⁹⁵

AZDEN (AZD)

PCS-7800H 50w 10m FM/TTP mic	Dwfv	299 ⁹⁵
PCS-7300H 35w 440 FM/TTP mic	Dm	249 ⁹⁵
PCS-9600D 35w 440 FM/9600 baud	Dfv	599 ⁹⁵
TS-32P Tone decoder	Dm	49 ⁹⁵
AZ-61 5w 6m FM HT/batt/cgr/TTP	Dm	299 ⁹⁵
AZ-21A 5w 2m FM HT/batt/cgr/TTP	Dm	199 ⁹⁵
AD-16 DC power cord for HT	Dm	9 ⁹⁵
BP-11A Extra 5w battery	Dm	59 ⁹⁵
LC-16 Soft case	Dmwf	19 ⁹⁵
HS-03 Boom mic/headphones; HF Xcv Dmwf	39 ⁹⁵	
PTT-01 Switch; boom mic/headph	Dmwf	39 ⁹⁵
ARD-10M 10m HT gain antenna	Dw	39 ⁹⁵

B & K (B&K)

AUDIO TEST INSTRUMENT

2005A RF generator	\$275.00	234 ⁹⁵
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CAPACITANCE METERS

810B Capacitance meter	\$99.95	
815 Tester (cap/res/Hfe/diode/batt)	99.95	
830 200 pF to 200mF autorange meter	339.00	289 ⁹⁵
875A Digital LCR meter	199.00	169 ⁹⁵
878 Universal hand-held LCR bridge	275.00	219 ⁹⁵

COUNTERS

1803C 100 MHz frequency counter	\$209.00	169 ⁹⁵
1823 175 MHz universal counter	399.00	339 ⁹⁵
1856A 2.4 GHz 1 ppm multi-function ctr	499.00	399 ⁹⁵

CRT RESTORER/ANALYZER

490 Tri Dynamic restorer/analyzer	1099.00	939 ⁹⁵
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DIGITAL PRODUCTS

DP-21 Digital logic probe	\$34.95	
911 Digital temperature meter	79.95	
921 Digital temp meter w/dual inputs	99.95	

EPROM PROGRAMMERS

840 EPROM programmer	\$199.00	169 ⁹⁵
841 4-socket EPROM programmer	249.00	219 ⁹⁵
842 Universal programmer, PC card interface	695.00	589 ⁹⁵
843 Universal prog, parallel port interface	795.00	679 ⁹⁵
846 Universal prog, parallel port interface	495.00	419 ⁹⁵
847 Univ prog, 4-socket/par port interface	595.00	499 ⁹⁵

B & K - continued

	Reg Sale
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GENERATORS

3001 Audio generator	\$79.95	
4010 2 MHz function generator	229.00	194 ⁹⁵
4011 5 MHz function generator w/counter	284.00	239 ⁹⁵
4017 10 MHz func gen w/counter/sweep	369.00	314 ⁹⁵
4040 20 MHz func gen/ctr/sweep/AM/FM	499.00	424 ⁹⁵

INSULATION TESTERS

305 Ins tester, 1000 megohms, 500vdc applied	\$129.00	109 ⁹⁵
306 Ins tester, 100 megohms, 500vdc applied	129.00	109 ⁹⁵
307 Multi-range analog insulation tester	189.00	159 ⁹⁵
308 Multi-range digital insulation tester	259.00	219 ⁹⁵

HIGH VOLTAGE PROBE

HV-44 Direct-reading 40kV DC probe	Dm	\$109.00	79 ⁹⁵
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ISOLATION TRANSFORMER

TR-110 Isolation transformer	\$219.00	189 ⁹⁵
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MULTIMETERS (ANALOG)

114A 20,000 ohms/volt analog multimeter	\$42.95	
117 Pocket size analog multimeter	13.95	
300 Insulation tester	129.00	109 ⁹⁵

MULTIMETERS (DIGITAL)

320 600A AC clamp meter	\$79.00	69 ⁹⁵
330 750A AC multi-function clamp meter	89.00	79 ⁹⁵
340A 300A multi-function clamp meter	109.00	89 ⁹⁵
350A 1000A multi-function clamp meter	149.00	129 ⁹⁵
367 2000A AC/DC clamp meter	169.00	149 ⁹⁵
369 700A AC/DC true RMS clamp meter	199.00	169 ⁹⁵
388A Test Bench DMM, 0.5% accuracy	119.00	99 ⁹⁵
389 Test Bench DMM, 0.25% accuracy	139.00	109 ⁹⁵
390 Test Bench DMM, 0.1% accuracy	159.00	134 ⁹⁵
391 Test Bench DMM, 0.05% accuracy	179.00	149 ⁹⁵

2405 Mini Pro DMM	27.95	
2406 Mini Pro DMM w/temperature	49.95	
2407 Min Pro autorange DMM w/bargraph	55.95	
2700 Credit-card size bargraph DMM	34.95	
2703A Tool kit DMM, basic model, 0.5%	39.95	
2704A Tool kit DMM w/cap/transistor/diode	59.95	
2706 Tool kit DMM, 2704A plus temperature	79.95	
2707 Tool kit DMM, 2704A plus logic & freq	89.95	

2831A	Digital bench multimeter	299.00	249 ⁹⁵
2832	3 1/2-dig 0.5% lab multimeter	D	219.00
2833	4 1/2-dig 0.05% true RMS multimeter	D	400.00
2835	3 1/2-dig 0.5% bench type LCD DMM	D	270.00
2860A	3 1/2-dig 0.5% ruggedized DMM		99.95
2870	Survivor DMM w/bargraph, true RMS		149.00
2880	3 1/2-dig 0.3% bar true RMS RS232 DMM		189.00
3000	Autobench DMM		270.00
5320	Power factor, rms, ac, motor		669 ⁹⁵

5330 Power factor clamp-on meter	779.00	669 ⁹⁵
5331 Power factor clamp-on meter	739.00	629 ⁹⁵
5350EX Intrinsically safe/haz environ DMM	699.00	599 ⁹⁵
5360 50,000 count .1% bar true RMS DMM	249.00	214 ⁹⁵
5370 50,000 count .05% bar true RMS DMM	289.00	244 ⁹⁵
5380 50,000 count .025% bar true RMS DMM	349.00	299 ⁹⁵
5390 50K ct. 0.25% resistive pwr disturb DMM	395.00	339 ⁹⁵
5460 50K ct. 1% bar true RMS bench DMM	425.00	359 ⁹⁵
5470 50K ct. 0.5% bar RMS RS232 bench DMM	525.00	449 ⁹⁵
5490 50K ct. 0.25% bar RMS RS232 bench DMM	675.00	574 ⁹⁵
TLA-20 Autobench test lead set	269.00	249 ⁹⁵

OSCILLOSCOPES

1541C 40 MHz 6" dual trace scope	\$799.00	679 ⁹⁵
2000 Autobench oscilloscope	795.00	674 ⁹⁵
2120 20 MHz dual trace oscilloscope	549.00	449 ⁹⁵
2125 20 MHz dual time base oscilloscope	646.00	519 ⁹⁵
2160A 60 MHz dual trace delayed sweep	1099.00	939 ⁹⁵
2190A 100 MHz three trace delayed sweep	1599.00	1359 ⁹⁵
2260 60MHz analog scope/cursors/readout D	1399.00	1169 ⁹⁵
2522A Digital storage oscilloscope	1099.00	929 ⁹⁵
2560 60MHz DSO, cursors/readouts/RS232 D	2395.00	2029 ⁹⁵
5020 20MHz 40 MS/s digital storage scope	2219.00	1889 ⁹⁵
5024 20MHz 40 MS/s differential input DSO	2290.00	1949 ⁹⁵
5034 30MHz 40 MS/s differential input DSO	2330.00	1979 ⁹⁵
5100 100MHz 40 MS/s digital storage scope	2495.00	2119 ⁹⁵
5105 100MHz 40 MS/s IEEE interface DSO	2695.00	2289 ⁹⁵

PRICE LIST

B & K - continued

5150 150MHz 200 MS/s digital storage scope	4995.00	4239 ⁹⁵
POWER SUPPLIES		
1604A Portable isolated AC supply	\$114.00	99 ⁹⁵
1646 0-16V, 0-10A power supply	499.00	279 ⁹⁵
1651 Power supply; (2) 0-24vdc, .5A; 5V, 4A	429.00	359 ⁹⁵
1653 0-150V, 2A isolated AC ps	319.00	279 ⁹⁵
1655 0-150V, 3A isolated AC ps/leak tester ..	529.00	449 ⁹⁵
1670 Triple output DC power supply	199.00	169 ⁹⁵
1680 Fixed 6A 13.8vdc power supply	50.95	
1682 Fixed 15A 13.8vdc power supply	99.95	
1686 High current DC power supply	199.00	169 ⁹⁵
1688 3-14VDC, 25A non. power supply	299.00	259 ⁹⁵
1705 0-30VDC, 0-1A LED readout ps	299.00	259 ⁹⁵
1710 0-30VDC, 0-1A power supply	229.00	194 ⁹⁵
1711 0-60VDC, 0-2A power supply	309.00	264 ⁹⁵
1715 0-60VDC, 0-2A LED readout ps	379.00	324 ⁹⁵
1730 0-30VDC, 0-3A power supply	315.00	269 ⁹⁵
1735 0-30VDC, 0-3A LED readout ps	380.00	329 ⁹⁵
1740 0-60VDC, 0-4A power supply	499.00	419 ⁹⁵
1743 0-35VDC, 0-6A LED readout ps	499.00	419 ⁹⁵
1746 0-16VDC, 0-10A power supply	499.00	419 ⁹⁵
1760 (2) 0-30V, 2A; (1) 4-6.5V, 5A LED ps ..	649.00	549 ⁹⁵

SEMICONDUCTOR TESTERS

510 Portable transistor tester	\$259.00	219 ⁹⁵
520B Industrial transistor tester	420.00	359 ⁹⁵
541 Component comparator	449.00	249 ⁹⁵
545 Circuit analyzer analog signature	2950.00	2499 ⁹⁵
560A Programmable PC board tester	2995.00	2549 ⁹⁵
AK-560A Software package for 560A	495.00	399 ⁹⁵
898 SIMM tester	725.00	619 ⁹⁵

SPECTRUM ANALYZERS

2615 500 MHz spectrum analyzer	1795.00	1529 ⁹⁵
2620 500 MHz spec analyzer w/tracking gen ..	2195.00	1869 ⁹⁵
2625 1.05GHz spec analyzer w/AM/FM demod ..	2595.00	2019 ⁹⁵
2630 1.05GHz spec an w/demod, tracking gen ..	3395.00	2889 ⁹⁵

TELEPHONE TEST INSTRUMENTS

1045B Telephone product tester	\$599.00	499 ⁹⁵
1050 Telephone product analyzer	D 2260.00	1899 ⁹⁵

VIDEO TEST INSTRUMENTS

1211D Portable color generator	\$235.00	199 ⁹⁵
1249B NTSC generator w/RGB	569.00	489 ⁹⁵
1251 NTSC signal generator	1195.00	999 ⁹⁵
1260 Deluxe NTSC signal generator	1995.00	1699 ⁹⁵
1280 Computer monitor video generator	429.00	369 ⁹⁵

ACCESSORIES

CP-3 AC/DC clamp meter	\$ 86.95	
PR-28 HV multimeter probe w/std dual banana	59.95	
PR-32 RF detector/demod scope probe w/BNC	59.95	

Mostly accs available on special order. B & K stocked mostly at Milwaukee. Call Ron Glish for B & K.

B & W COAX SWITCHES (B&W)

CSR-56 5-position, side connectors	\$ 51.95	
CS-66 6-position, for desk/wall mounting ..	51.95	

Note: Above switches provide grounding of unused terminals, & are supplied w/face plates & knobs.

LOW-PASS FILTER

FL-10/1500 1.5-30 MHz, 1kw, 52 ohms	\$ 75.95	
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ANTENNAS

AP-10 57" portable 40/20/15/10/6/2m ant ..	\$ 69.95	
AT-55 40/20/15/10m 55' trap antenna	87.95	82 ⁹⁵
AT-110 80/40/20/15/10m 110' trap antenna ..	99.50	94 ⁹⁵
AT-110K As above, but kit	84.50	59 ⁹⁵
AS-160 160/80/40/20m 137' trap dipole	164.50	154 ⁹⁵
AS-80 80/40/20m 78' trap dipole	127.50	119 ⁹⁵
AS-40 40/20/15/10m 40' trap dipole	164.50	154 ⁹⁵
AS-20 20/15/10m 23' trap dipole	127.50	
AXS-160 160/30m 96' trap dipole	99.50	94 ⁹⁵
AXS-80 80/40/15m 72' trap dipole	127.50	119 ⁹⁵
AC-1.8-30 Continuous 1.8-30MHz antenna ..	185.00	169 ⁹⁵
ACS-1.8-30 Continuous 1.8-30MHz antenna ..	260.00	239 ⁹⁵

B & W - continued

BWD-1.8-30 1.8-30 MHz 90' folded dipole ...	198.00	179 ⁹⁵
BWDS-1.8-30 1.8-30 stainless 90' folded dip	273.00	249 ⁹⁵

BAYGEN (BAY)

FPR-1B AM/FM/5.8-18SW 30 min Freeplay radio	\$ 99.95	
FPR-2 AM/FM 60 minute Freeplay radio	69.95	
FPR-25C AM/FM/solar clear case Freeplay ..	79.95	
FPR-25M AM/FM/solar gray case Freeplay	79.95	
AC Adapter For Freeplay radio	10.99	
Headphones For Freeplay radio	14.99	
SWL Antenna Indoor shortwave antenna	19.99	
FP-SL Self powered Freeplay lantern	69.95	
Bulb 3-pack replacement bulbs	6.99	

BELDEN (BEL)

52 OHM COAXIAL CABLE

8216 RG-174 (sub-miniature)	per ft.	26¢
8216	100 ft. Roll	24 ⁹⁵
8216	500 ft. Roll	129.87
8216	1000 ft. Roll	259.74
9201 RG-58 (solid center)	per ft.	20¢
9201	100 ft. Roll	18 ⁹⁵
9201	500 ft. Roll	109.89
9201	1000 ft. Roll	216.45
8240 RG-58U (solid center)	per ft.	26¢
8240	100 ft. Roll	38.20
8240	500 ft. Roll	131.00
8240	1000 ft. Roll	262.00
8259 RG-58AU (stranded center)	per ft.	29¢
8259	100 ft. Roll	43.00
8259	500 ft. Roll	137.00
8259	1000 ft. Roll	276.00
8219 RG-58AU (stranded, foam)	per ft.	33¢
8219	100 ft. Roll	57.25
8219	500 ft. Roll	155.00
8219	1000 ft. Roll	387.50
8262 RG-58C (non-contaminating)	per ft.	36¢
8262	100 ft. cut	32 ⁹⁵
8262	500 ft. Roll	173.00
8262	1000 ft. Roll	346.00
9258 RG-8X (stranded, foam)	per ft.	39¢
9258	100 ft. Roll	81.25
9258	500 ft. Roll	217.56
9258	1000 ft. Roll	490.00
8237 RG-8U	per ft.	64¢
8237	100 ft. Roll	102.00
8237	500 ft. Roll	390.00
8214 RG-8U (foam)	per ft.	59¢
8214	100 ft. Roll	101.00
8214	500 ft. Roll	452.00
8214	1000 ft. Roll	898.00
9913 RG-8U (low loss)	100 ft. Roll	113.00
9913	250 ft. Roll	244.00
9913	500 ft. Roll	486.00
9913F RG-8U (low loss, flexible)	per ft.	87¢
9913F	100 ft. Roll	134.00
9913F	250 ft. Roll	289.00
9913F	500 ft. Roll	575.00
9251 RG-8A (non-contaminating)	per ft.	87¢
9251	100 ft. Roll	132.09
9251	500 ft. Roll	492.84
8267 RG-213 (non-contaminating)	per ft.	87¢
8267	100 ft. cut	79 ⁹⁵
8267	500 ft. Roll	597.18
8242 RG-9U (double shielded)	per ft.,m	4 ⁹⁵
8242	100 ft. Roll,m	715.00

75 OHM COAXIAL CABLE

8241 RG-59U (73 ohm, solid center)	per ft.	29¢
8241	100 ft. Roll	44.00
8241	500 ft. Roll	123.00
8241	1000 ft. Roll	246.00

BELDEN - continued

8238 RG-11 (75 ohm, stranded center) per ft.		79¢
8238	100 ft. Roll	124.32
8238	500 ft. Roll	470.64
8213 RG-11 (75 ohm, solid, foam)	per ft.	69¢
8213	100 ft. cut	59 ⁹⁵
8213	500 ft. Roll	360.00

ROTOR CABLE

8484 4-wire; 4-20 ga; U-105	per ft.	28¢
8484	100 ft. Roll	48.00
8484	100 ft. Roll	185.00
8484	1000 ft. Roll	370.00
8448 8-wire; 2-18, 6-22 ga; CD-45/HAM-IV per ft.		29¢
8448	100 ft. Roll	103.75
8448	500 ft. Roll	412.50
8448	1000 ft. Roll	820.00
9405 8-wire; 2-16, 6-18 ga; AR-40/HAM-IV/TX per ft.		69¢
9405	100 ft. cut	64 ⁹⁵
9405	500 ft. Roll	585.00
9405	1000 ft. Roll	1167.50

ANTENNA WIRE

8000 No. 14 stranded ant wire	per ft.	21¢
8000	100 ft. Roll	30.50
8000	1000 ft. Roll	275.00

No. 8 ALUMINUM GROUND WIRE

8018 Multiples of 50 ft.	each	\$ 19.00
8018	500 ft. Roll	150.00

Note: All above roll pricing is for rolls as shown only; all other lengths, even if more than roll length shown or a multiple of roll length shown, are sold at the per ft. price.

FOAM COAX W/PL-259s ON BOTH ENDS

9349 3' RG-58AU foam	\$ 19.32	14 ⁹⁵
9350 15' RG-58AU foam	21.63	16 ⁹⁵
9352 50' RG-58AU foam	32.13	24 ⁹⁵
9354 50' RG-8U foam	60.90	46 ⁹⁵
9355 75' RG-8U foam	84.00	64 ⁹⁵
9356 100' RG-8U foam	101.85	79 ⁹⁵

BELMERIT (BLM)

DM-3050 Wide range dig multitrn/freq test Dw	\$ 59.95	29 ⁹⁵
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BENCHER (BEN)

BY-1 Iambic keyer paddle w/black base	\$ 92.95	87 ⁹⁵
BY-2 Iambic keyer paddle w/chrome base	109.95	104 ⁹⁵
BY-3 Iambic keyer paddle, gold plated	299.95	249 ⁹⁵
BY-4 Iambic paddle/blk base/gold components	169.95	149 ⁹⁵
ST-1 Single lever keyer paddle, black base ..	92.95	87 ⁹⁵
ST-2 Sgl lever kyr paddle, chrome base	109.95	104 ⁹⁵
ST-3 Single lever kyr paddle, gold plated Δmf	299.95	199 ⁹⁵
ST-4 Sgl lever paddle/blk base/gold comp Δwfv	169.95	99 ⁹⁵
RJ-1 Dix hand key w/navy knob/black base ..	89.95	
RJ-2 Dix hand key w/navy knob/chrome base ..	99.95	
XW-1 Low voltage DC fuse panel	79.95	
XW-20 Fuse kit	5.95	
XW-39 Crimp terminal kit	3.95	
XW-40 Screw terminal kit	4.95	
YA-1 1kw low pass filter	69.95	
ZA-1A 3.5-30 MHz 1:1 balun	42.95	
HWK Hardware kit; ZA-1A for 2" boom	9.95	

BIRD (BIR)

43 ThruLine Directional wattmeter, SO-239s	\$263.95	
4300-400 Peak reading conversion kit	125.95	
43P Peak reading directional meter, SO-239s	396.95	
4431 Wattmeter, variable RF pat, SO-239s ...	464.95	
Elements (Table 1) 50H-1000H	each	88.95
Elements (Table 1) 2500H, 5000H	each	126.95
Elements (Table 1) 25-1000 MHz	each	71.95
Low-power elements (Table 2)	each	95.95

See BIRD Element chart on next page

BIRD - continued

Reg Sale

TABLE 1 - Standard Elements

Frequency Bands (MHz)

Power Range	2-30	25-60	50-125	100-250	200-500	400-1000
5 watts	—	5A	5B	5C	5D	5E
10 watts	—	10A	10B	10C	10D	10E
25 watts	—	25A	25B	25C	25D	25E
50 watts	50H	50A	50B	50C	50D	50E
100 watts	100H	100A	100B	100C	100D	100E
250 watts	250H	250A	250B	250C	250D	250E
500 watts	500H	500A	500B	500C	500D	500E
1000 watts	1000H	1000A	1000B	1000C	1000D	1000E
2500 watts	2500H					
5000 watts	5000H					

TABLE 2 - Low-Power Elements

1 watt	Cat. No.	2.5 watts	Cat. No.
25-30 MHz	025-1	25-30 MHz	025-2
30-35 MHz	030-1	30-40 MHz	030-2
35-40 MHz	035-1	40-50 MHz	040-2
40-50 MHz	040-1	50-60 MHz	050-2
50-60 MHz	050-1	60-80 MHz	060-2
60-80 MHz	060-1	80-95 MHz	080-2
80-95 MHz	080-1	95-150 MHz	095-2
95-125 MHz	095-1	150-250 MHz	150-2
110-160 MHz	110-1	200-300 MHz	200-2
150-250 MHz	150-1	250-450 MHz	250-2
200-300 MHz	200-1	400-850 MHz	400-2
275-450 MHz	275-1	800-1000 MHz	801-2
425-850 MHz	425-1		
800-1000 MHz	801-1		

CC-1 Carrying case	46.95
EC-1 Element case	36.95
25-T-MN 50w dummy load w/type N male	105.95
50-T-MN 50w dummy load w/type N male	138.95
4273 1.5-35 MHz variable RF sig sampler*	133.95
4273-100 For Bird equipment installation	144.95
4275 20-1000 MHz variable RF sampler*	128.95
*2 QC connectors required - not included	
4275-100 For Bird equipment installation	144.95
4304A 25-1000 MHz 500w wattmeter	519.95
QUICK CHANGE CONNECTORS (QC)	
4240-050 UHF female (S0-239)	\$ 8.95
4240-179 UHF male (PL-259)	each 46.95
4240-062 Type N female	each 8.95
4240-125 BNC female	each 20.95
4240-132 BNC male	each, Δmw 56.00

Other Bird items available on special order

BUCKMASTER (BUC)

HamCall CD-ROM ham listings; IBM/Mac ... \$ 50.00

BUTTERNUT (BUT)

HF-6VX 80/40/30/20/15/10m 26' vert ant	\$330.00	269 ⁹⁵
HF-9VX 80/40/30/20/17/15/12/10/6m vert	390.00	319 ⁹⁵
A17-12 17 & 12m kit for HF-6VX	52.95	
CPK Counterpoise kit	120.00	109 ⁹⁵
MPS Mounting post sleeve	8.95	
RMK-II Roof mounting kit w/radials	148.00	139 ⁹⁵
STR-II Radial kit only	106.00	95 ⁹⁵
TBR-160S 160m resonator for HF-6VX	110.00	95 ⁹⁵
HF-2V 80/40m 32' vertical	242.00	199 ⁹⁵
30-MRK 30m resonator for HF-2V	90.95	
TBR-160S 160m resonator	110.00	99 ⁹⁵
HF-5B 2 el 20/17/15/12/10m butterfly beam	567.00	449 ⁹⁵

CES (CES)

410 Personal Patch interconnect	Dw \$250.00	129 ⁹⁵
4700VP Telephone interconnect	† 292.00	169 ⁹⁵
SDI-50 Dlx splx/dplx autopatch/rptr controller	760.00	469 ⁹⁵

CQ (CQX)

1998 Amateur Radio Calendar	\$ 9.95
1998 Radio Classics Calendar	9.95
33 Simple Weekend Projects	15.95
Amateur Radio Almanac	19.95
Building and Using Baluns and Ununs	19.95

CQ - continued

Buyers Guide	15.95
Contest Video Getting Started in Contesting	19.95
DXing Video Getting Started in DXing	19.95
Ham Sat Video Getting Started Amateur Satellites	19.95
Ham Video Getting Started in Ham Radio	19.95
Low McCoy on Antennas	15.95
Packet Radio Operator's Manual	15.95
Packet Video Getting Started in Packet Radio	19.95
Quad Antenna Book	15.95
Shortwave Propagation Handbook	19.95
Vertical Antenna Handbook	9.95
VHF How To Book	15.95
VHF Video Getting Started in VHF	19.95
W5SAI HF Antenna Handbook	19.95

CAMBRIDGE (CAM)

The Art of Electronics (book) \$ 59.95

CASTLE RIDGE (CRO)

SOLID BASE COPPERWELD ANTENNA WIRE

AN-122 100 feet No. 12	\$ 24.95
AN-123 150 feet No. 12	29.95
AN-124 250 feet No. 12	49.95
AN-126 500 feet No. 12	84.95
AN-128 1000 feet No. 12	154.95
AN-142 100 feet No. 14	19.95
AN-143 150 feet No. 14	24.95
AN-144 250 feet No. 14	32.95
AN-146 500 feet No. 14	56.95
AN-148 1000 feet No. 14	104.95
AN-181 250 feet No. 18	14.95
AN-182 500 feet No. 18	24.95

CENTAUR (CEN)

CP-1 Cricket Pulser Station tuning accessory	\$ 67.95
B11W10-50 1:1 3kw PEP balun for dipole	49.95
B11Y10-50 1:1 3kw PEP balun for yagi	49.95
B41Y10-50 4:1 3kw PEP balun for yagi	64.95
B41LW10-50 4:1 ladder line to coax balun	64.95

CHEROKEE (CHR)

AH-50 5w 6m FM HT w/nicad batt	† \$399.95	199 ⁹⁵
AH-50SF 5w 6m FM HT/batt/selectable offset	449.95	249 ⁹⁵
BC-09 6 AA cell battery holder	13.95	
BC-12 8 AA cell battery holder	17.95	
CC-27 Leatherette case	13.95	
DA-27 12v slide-on adapt; BC-09/NP-126	13.95	
DC-27 Drop-in nicad charger	79.95	
DW-12 Wall charger	7.95	
EX-01 Speaker/mic	29.95	
MA-27 Mobile-com cig/ext ant adapter	44.95	
NP-126 12v nicad battery	69.95	
SA-5 Extended super flex 6m antenna	24.95	

CLOCKS

BMI 972A 12" 12-hour wall clock	\$ 28.95
BMI 972AD 18" 12/24-hour wall clock	32.95
BMI 973A 12" 24-hour wall clock	49.95
MFJ 105C 24-hour quartz wall clock	19.95
MFJ 107B 24-hour digital clock	9.95
MFJ 108B 24/12-hour dual disp digital clock	19.95
MFJ 112 Deluxe world map clock	24.95
MFJ 114 Large LED 24-hour clock	39.95
MFJ 116 24/12-hr LED clock/10 minute timer	14.95
MFJ 118 Giant 24/12 hour LCD clock	24.95
MFJ 119 Giant 24/12 hour LCD/in temp clock	49.95
MFJ 152 Thermo clock; in/out temp/24-hr	24.95

COAX SEAL (UNV)

104 1/4" x 60" coax seal \$ 2.95

COMET (CMT)

MOBILE ANTENNAS

B-10 2m/440 2.15db 12" cell look-alike ant	\$ 39.95
B-10NMO 2m/440 2.15db 12" cell look-alike NMO	39.95
B-20 2m/440 2.15/5db 30" cell look-alike ant	49.95

Reg Sale

COMET - continued

Reg Sale

B-20NMO 2m/440 2.15db/5db 30" cell look NMO	49.95
CA-2X4SR 2m/440 3.8/6.2db 40" mob ant	64.95
CA-220MR 220 4.2db 3' 3" fold-over ant Dwf	49.95
CA-HV 40/15/10/6/2m 5' 10" mobile ant	139.95
L-14 20m loading coil for CA-HV	36.95
L-18 17m loading coil for CA-HV	29.95
CHL-28J 2m/440 3/5.5db 36" mobile ant	29.95
CHL-28JNMO 2m/440 3/5.5db 36" NMO ant	29.95
CHL-62S 2m/440 3.5/6db 42" mobile ant	49.95
CHL-62SNMO 2m/440 3.5/6db 42" NMO ant	49.95
CHL-350 10/6m 0/2.15db fold-over 7" ant	79.95
CX-224 2m/220/440 2.15/3.2/5.5db 42" mob Dm	79.95
FL-7HA 40m 40" mobile antenna	Df 82.95
FL-50HA 6m 33" mobile antenna	Df 82.95
FS-92B 2m/440/1.2 2.1/4.1/6.8 23" N ... Dm	82.95
HA-4S 40/15/12/10m 4' 5" mobile ant	199.95
L-14HS 20m loading coil for HA-4S	39.95
L-18HS 17m loading coil for HA-4S	39.95
HA-028 10m 33" 3/4 wave mobile ant	Df 82.95
HA-035 80m 45" mobile antenna	82.95
HA-050 6m 33" 3/4 wave mobile antenna	82.95
HP-32 2m/440 3.5/5db 34" 350/250w ant	89.95
M-24B 2m/440 1.7/4.1db mag mt ant w/BNC	39.95
M-24M 2m/440 1.7/4.1db mag ant w/PL259	39.95
QE-07 40m 50" mobile antenna	82.95
QE-14 20m 49" mobile antenna	82.95
QE-21 15m 49" mobile antenna	82.95
QE-28 10m 46" mobile antenna	82.95
OP-07 40m optional element for QE ant	42.95
OP-14 20m optional element for QE ant	42.95
OP-21 15m optional element for QE ant	42.95
OP-28 10m optional element for QE ant	42.95
QE-5 2m/440 2.15/5.5db 38" quick release	54.95
R-2000 900MHz 5.1db 19" type N mob ant	42.95
SBB-1 2m/440 1.5/2.15db 16" flex mobile	39.95
SBB-1NMO 2m/440 1.5/2.15db 16" flex NMO	39.95
SBB-2 2m/440 2.15/3.8db 18" black mobile	39.95
SBB-2NMO 2m/440 2.15/3.8db 18" blk NMO	39.95
SBB-5 2m/440 3/5.5db 38" black mobile ant	54.95
SBB-5NMO 2m/440 3/5.5db 38" black NMO	54.95
SBB-7 2m/440 4.5/7.2db 4' 7" black mob ant	74.95
SBB-7NMO 2m/440 4.5/7.2db 4' 7" blk NMO	74.95
SB-14 6m/2m/440 43" chrome mobile ant	64.95
SB-15 6m/2m/440 2.15/4.5/7.2db 5' chr mob	89.95
SBB-25 2m 4.1db black mobile antenna	44.95
SBB-25NMO 2m 4.1db black NMO mob ant	44.95
SB-44 440 5db 29" mobile antenna	54.95
SB-83 2m/440/cell 3/6/8.4db 35" type N ant	68.95
SBB-94 2m/440/1.2 black 24" N antenna	69.95
SB-97 2m/440/1.2 3/6/8.9.6db 39" type N	79.95
SB-123 1.2GHz 7.2db 24" type N mobile ant	54.95
SB-214W 2m/220 3' 1.7/3.4db mob ant	49.95
SBB-224 2m/220/440 2.15/3.2/5.5 blk mob	74.95
SBB-224NMO 2m/220/440 2.15/3.2/5.5 blk NMO	74.95
SB-220MR 220 4.2db 3' 3" mobile antenna	49.95
SF-245 2.4 GHz 7db 18" fg type N ant	61.95
Z-750 2m/440 2.1/5.5db 39" theft resistant	62.95
Z-780 2m/440 4.5/7.2db 5' theft resistant	82.95
MOBILE ANTENNAS, ETC	
3D4M Mobile mt, 13' coax w/UHF connectors	\$ 24.95
3D4N Mobile mt, 13' coax w/type N	28.95
3D5M Mobile mt, 16.5' coax w/UHF connectors	27.95
5D4N Roof mount, 13' coax w/type N	31.95
AD-10N N-NMO mount adapter	17.95
AD-15M UHF-NMO mount adapter	17.95
CA-MS1 Mag mt only, no coax; add 3D4M, etc	22.95
CG-4M RS-2 gutter mount w/13.5' coax	29.95
CK-3M Dlx 2-step 10' cable w/UHF connectors	33.95
CK-3M5 Dlx 2-step 16.5' cable w/UHF connects	39.95
CK-5N Dlx cable assembly w/type N	47.95
CM-5M Hvy duty mag mt, coax, max 4' ant	39.95
CQ-5M Dlx black QD trunk lip mt w/17' coax	66.95
CQ-5N Dlx black QD trunk lip mt w/17' coax/N	69.95
CR-5M Std coax assy, 16.5' coax, UHF conn	19.95

PRICE LIST

COMET - continued

CT-5M Trunk lip mount w/17' coax	39.95
GR-5M Dlx tnl lip mt w/coax; matches SB	67.95
GR-5N Dlx T tnl lip mt w/coax; matches SB	69.95
MS-3FVNN Std duty mag mount w/Type N	49.95
MS-5LXMM Dlx mag mt, 2-step cable/UHF mt	57.95
RS-2 Small gutter mount	22.95
RS-6 Pipe clamp mount	29.95
RS-9 Trunk lip mount, no coax	11.95
RS-20 Gtr mt; small/med ants, no coax	29.95
RS-21 360 deg hatch/tnl mt, no coax	34.95
RS-81 Adj trunk/hatch mount, no coax	34.95
RS-500 Mini heavy duty gutter mount Dmwf	28.95
RS-520 Mini heavy duty trunk/hatch mount	28.95
RS-560C Luggage rack mount, no coax	35.95
RS-720 Hatch/rear door/tnl mt multi-adj mt	29.95
RS-820 Low profile trunk lip mount, no coax	39.95
RS-850 Luggage rack mt, no coax	42.95
TS-1M Trunk lip mt w/coax	45.95
WS-1M Window clip mt w/UHF connectors	64.95

BASE STATION ANTENNAS

CA-712EF 440 9db 10' 5" base antenna	\$119.95
CA-ABC21 2m 3.4db 4' 7" base antenna	49.95
CA-ABC22A 2m 6.5db 9' 5" base/rptr ant	69.95
CA-ABC23 2m 7.8 db 13' 4" base/rptr ant	109.95
CA-F226F 136-175 6db 8' 10" tun	154.95
CA-F726F 440-470 6db 3' 6" tunable ant	119.95
CA-Super22 220 6.6db 8' 2" base ant	159.95
CMR-241 2m/440 4.5/7.2db 6.5' rptr ant Dwc	174.95
CS-333 2m/220/440 6.5/7.8/9db 10.25' ant	189.95
CYA-240 1.2GHz 5.5/11.6 6db 5.25' bm yagi	109.00
CYA-1216E 2.4GHz 16el 16.6db 4' 5" N beam	149.95
DS-15 6m/2m/440/900/1.2 discone antenna	99.95
GP-3 2m/440 4.5/7.2db 5' 11" base/rptr ant	99.95
GP-6 2m/440 6.5/9db 10' 2" base/rptr ant	159.95
GP-9 2m/440 8.5/11.9db 17' 8" base/rptr	199.95
GP-9N 2m/440 8.5/11.9db 17' 8" N base/rptr	199.95
GP-15 6.2m/440 3.6/2.8 6db 8' base	164.95
GP-21/CA-1221S 1.2 4.2 14.8db 8.5' N base/rptr	159.95
GP-24 2.4GHz 12.4db 2' type N base/rptr	229.95
GP-93 2m/440/1.2 4.5/7.2/10db 5' 7" type N	139.95
GP-98 2m/440/1.2 6.5/9/13.5db 9' 8" ant	209.95
KP-20 900 MHz 9.2db 7' 4" type N base/rptr	121.95
PYA-913 900MHz 13el 15.8db 4' 8" type N beam	169.95

DUPLEXERS AND TRIPLEXERS

CF-142 1.3-150/200-480 600/400w UHF/leads	\$ 69.95
CF-360A 1.3-30/50-470 600w UHF w/leads	69.95
CF-360B 1.3-30/50-470 600w UHF/common lead	69.95
CF-413A 440/1.2 500/200w N w/leads	74.95
CF-413B 440/1.2 500/200w N/UHF w/leads	74.95
CF-416A 2m/440 800/500w UHF w/leads	46.95
CF-416C 2m/440 800/500w N/UHF w/leads	49.95
CF-416W 1.3-250/400-1400 400/200w N/leads	69.95
CF-530 1.3-90/125-470 600w UHF w/leads	69.95
CF-706 1.3-56/75-320 350w UHF w/leads	69.95
CF-4130A 440/1.2 500/200w N, no leads	74.95
CF-4160I 2m/440 800/500w UHF/UHF/N, no leads	45.95
CF-4160J 2m/440 800/500w SO239, no leads	53.95
CF-4160K 2m/440 800/500w all UHF, no leads	45.95
CFX-324A 2m/220/440 600w UHF w/leads	88.95
CFX-324B 2m/220/440 600w UHF, no leads	85.95
CFX-431A 2m/440/900-1.2 N/UHF/N/N, leads	85.95
CFX-431B 2m/440/900-1.2 N/UHF/UHF/N, leads	79.95
CFX-514 HF/2m/440 800/800/500w UHF w/leads	74.95
CFX-5141 HF/2m/440 800/800/500w UHF, no leads	74.95
CFX-4310B 2m/440/900-1.2 N/UHF/N/N, no leads	79.95
CFX-4310C 2m/440/1.2 Kenwood TM-71A/941A	79.95
CFX-5140 HF/6m/2m/440 800/800/500w UHF, no leads	74.95

HT AND HAND-HELD SCANNER ANTENNAS

CH-32 2m/440 1.75' BNC antenna	\$ 29.95
CH-72S 2m/440 0/3.2db 15" BNC ant	29.95
CH-75 2m/440 0/3.2db 14.75" BNC ant	25.95
CH-701X 2m/440/900 2/3.4/5.5db 19" BNC	54.95
CH-720C 2m/440 0/3.8db 18" BNC	39.95
CH-722SA 2m/440 3/5.5db BNC whip ant	45.95

COMET - continued

CY-1205BNC 1.2GHz 11db 7" BNC beam	49.95
SH-55 2m/440 1.5/3.2db 15" BNC ant	33.95
SH-55 2m/440/1.2 1.5/2.15/5.5db BNC ant	34.95
SMA-3 2m/440 1.2 1.7/1.7db 9.75" SMA ant	39.95
SMA-501 2m/440/900 1.5" SMA ant	29.95
SMA-503 2m/440 8.75" SMA antenna	29.95

SWR/POWER METERS & MINIMETERS

CM-120 1240-1300 MHz type N minimeter	\$ 99.95
CM-690 1.9-60 MHz 20/150w minimeter	79.95
CM-720 140-150/430-450 MHz minimeter	79.95
CM-720N 140-150/430-450 Type N minimeter	84.95
CM-903 900-920 MHz type N minimeter	99.95
CMX-1 1.8-60 MHz 2000w SWR/pwr/rem head	179.95
CMX-2 1.8-200MHz 200w SWR/pwr/rem head	179.95
CMX-3 140-525 MHz 200w SWR/pwr/rem head	169.95
EKS-3 10' remote head extension cable	23.95

Accessories

CS-290P 1500MHz 150w N lightning protect	\$ 39.95
CS-400P 500MHz 250w lightning protect	34.95
CSP-30 Mini speaker w/magnet mt	34.95
CSP-80 Mini spkr/mag mt/noise filt/mute Dmwf	39.95
CSW-20N 0-1300MHz N coax switch	99.95
HM-P2F Mini spkr/mic; Ali/Ico/Sta/Yae	32.95
HM-P2K Mini spkr/mic for Kenwood	32.95
HM-P4F Mini "HT" spkr/mic; Ali/Ico/Sta/etc	32.95
HM-P4K Mini "HT" spkr/mic for Kenwood	32.95
HM-P4Y Mini "HT" spkr/mic for Yaesu	32.95

Communications Specialists (COM)

SS-64 64-tone mini prog CTCSS encoder	\$ 28.95
TE-32 32-tone CTCSS prog encoder box	49.95
TE-64 64-tone CTCSS/burst switch enc box	79.95
TS-32P 32-tone CTCSS prog encoder/decoder	57.95
DTD-1 DTMF decoder	49.95
ID-8 Automatic Morse station identifier	69.95

CONNECTORS

AMPHENOL COAX CONNECTORS (AMP)

83-ISP-1050 Male coax plug (PL-259)	\$ 1.95
83-ISP Silver plated coax plug (PL-259)	2.95
Van Gorden (VAN) silver plated teflon PL-259	2.99
83-185 Reducer for RG-58 (UG-175)	.95
83-168 Reducer; RG-59/RG-8X (UG-176)	.95
83-1AP Right angle adaptor (UG-646)	5.95
83-1J Double female adaptor (PL-258)	3.95
83-1R Female chassis mt socket (SO-239)	2.95
83-1H Hood; in-line use w/83-1R (UG-106)	4.95
83-1T T-connector adaptor (M-358)	8.95
83-877 Double male adaptor	10.95
83-878 Single hole 3/8" chassis socket	2.95
31-002 BNC male connector for RG-58	3.95
31-012 BNC male connector; RG-59/RG-8X	4.95
31-221 BNC female chassis socket	2.95
82-24 Type N female chassis mt socket	4.95
82-61 Type N male connector for RG-8	7.95
82-64 Type N right angle adaptor	20.95
82-202-1006 Type N male; 8214/9913/9913F	7.95
82-209 Type N female in-line for RG-8	7.95
34025 Type N male connector for RG-58	6.95

AMPHENOL COAX ADAPTORS (AMP)

2900 SO-239 to BNC male adaptor	\$ 9.95
4400 SO-239 to type N male adaptor	13.95
34125 Type N female - PL-259 adapt	21.95
31-28 BNC female to PL-259 adaptor	9.95
83-10 SO-239 to Motorola/phono plug	10.84

AIM CONNECTORS, PLUGS & ADAPTORS

19-1289 8-pin female mic plug	\$ 4.95
25-7351 Chassis mt SO-239 double female	3.95
25-7365 BNC female to SO-239	3.95
25-7420 BNC male to SO-239	2.95
26-8010 Type N double female	3.95
26-8011 Type N chassis mount	2.95
26-8015 N male to SO-239	4.95
26-8016 BNC female to N male	4.95

CONNECTORS - continued

26-8017 BNC male to N female	4.95
27-8110 BNC female to RCA male	1.95
27-8120 BNC female to PL-259	2.95
27-8130 BNC double male	3.95
27-8140 BNC T; 2 female, 1 male	2.95
27-8142 BNC T, 3 male	2.95
27-8450 BNC chassis mt, 4 screw holes	6.40
27-8460 3/4" hole BNC chassis mt	1.95
27-8470 Dual BNC chassis mount	3.95
29-3855 BNC female to SMA male	3.95
29-4105 SO-239 to TNC male adaptor	3.95
29-4110 Double female adaptor	2.95
29-4120 "T" 1 male, 2 female	4.95
29-4140 SO-239 to mini PL-259	2.95
29-4145 SO-239 - PL-259 adaptor	3.95
29-4150 UHF male - BNC female adapt	2.95
29-4155 Mini SO-239 - BNC male adapt	5.95

CONNECTORS UNLIMITED (CON)

306 SO-239 to BNC male adaptor	\$ 2.76
1721 7-pin DIN plug	1.38

Switchcraft 1/4" Plugs w/Solder Terminals (SWI)

267 3-conductor, plastic handle	\$ 5.50
237 3-conc, plastic handle, rt angle plug	5.15
260 3-conductor w/screw terminals	6.95
297 3-conductor, metal handle	6.55
250 2-conductor, plastic handle	3.95
220 As abv, w/screw terminals, rt angle plug	5.95
280 2-conductor, metal handle	4.95

SWITCHCRAFT PHONO-TYPE CONNECTORS (SWI)

3501MC Phono plug with cable clamps	\$.95
3502 Shielded phono plug	2.95
3507 RF-type phono plug	3.95

VANCO MICROPHONE CONNECTORS (VCO)

CBC-2 2-pin female mic plug	\$ 3.95
CBC-3 3-pin female mic plug	2.95
CBC-4 4-pin female mic plug	4.95
CBC-4P Panel mt 4-pin male	2.95
CBC-5 5-pin female mic plug	3.95
CBC-5P Panel mt 5-pin male	2.95
CBC-6 6-pin female mic plug	4.95
CBC-6P Panel mt 6-pin male	3.95
CBC-8P Panel mt 8-pin male	5.95

KENWOOD DIN PLUGS (KEN)

7-pin DIN plug	\$ 4.95
8-pin DIN plug	6.95
13-pin DIN plug	9.95

VANCO MINI PHONE PLUGS (VCO)

P-25 2.5mm sub-miniature phone plug	\$.99
P-35 3.5mm miniature phone plug	.99
P-12V Cig lighter plug w/leads	2.95

Connect Systems (CSY)

CS-700 Simplex interconnect	Dmwf
CS-800 Full duplex patch & repeater controller	485.00
CS-900 Simplex interconnect	485.00
CD-2 DTMF/CTCSS/DCS decoder unit/RS-232	284.00
CD-2P PC application program for CD-2	113.00
LT-2P PC application program for LT-2	113.00

COYNE (COY)

MacHam General	\$ 34.95
MacHam Advanced	34.95
MacHam Extra	34.95
MacHam Radio Morse Code training soft	39.95

CROSS DEVICE (CRS)

STUF Coax connector waterproofing filler	\$ 4.95
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CUSHCRAFT (CUS)

VHF/UHF FM BEAMS* (Vertical polarization)

A148-3S 2m, 3 el wideband beam	\$ 47.95
A148-10S 2m, 10 el wideband beam	85.00
A148-VPKS Stack kit; 2 A148-3S/10S	108.00
A148-20S 2 A148-10S vert stacked	233.00

CUSHCRAFT - continued

A449-6S	440 MHz, 6 el, 3' boom, 10 db	45.95	
A449-11S	440 MHz, 11 el, 4.5' boom, 13 db	69.00	64 ⁹⁵

*These antennas can be mounted vertically or horizontally!

DUALBAND 2M/440 FM BEAMS* (Vert polarization)

A270-6S	2m/440, 3/3 el, 2.8' boom, 7.8 db	\$ 75.00	69 ⁹⁵
A270-10S	2m/440, 5/5 el, 6.17' boom, 10 db	99.00	89 ⁹⁵

*These antennas can be mounted vertically or horizontally!

FM VERTICAL STACKING KITS* (Adds 3 db)

A14-SK	Harness only for 2 A148-3S	..Dmwf	\$ 48.00 19 ⁹⁵
A148-SK	Harness only; 2 A148-10S	..Dmwf	48.00 29 ⁹⁵
A449-SK	Harness only; 2 A449-6S/11S	..Dv	48.00 29 ⁹⁵

*Prices are for stacking kits only

FM RINGOS - 1/2 Wave Verticals - 3.75 db

AR-10	10m FM Ringo, 1000w	..	\$ 85.00 79 ⁹⁵
AR-6	6m FM, 1000w	..	71.00 64 ⁹⁵
AR-2	2m FM, 1000w	..	50.00 44 ⁹⁵
AR-50	440 MHz FM, 500w	..	35.95

RINGO RANGERS - FM Verticals - 6 db

ARX-6	6m FM Ringo Ranger	..	\$259.00 199 ⁹⁵
ARX-2	2m FM Ringo Ranger	..	60.00 54 ⁹⁵
ARX-2B	2m FM Ringo Ranger II, 1000w	..	73.00 59 ⁹⁵
ARX-220B	220 FM Ringo Ranger II, 500w	..	73.00 64 ⁹⁵
ARX-450B	440 FM Ringo Ranger II, 500w	..	73.00 64 ⁹⁵

DUALBAND 2M/440 FM VERTICALS

AR-270	2m/440 MHz FM, 250w, 3.7/5.5db	..	\$ 88.00 79 ⁹⁵
AR-270B	2m/440 MHz FM base ant	..	128.00 99 ⁹⁵
ARX-270N	2m/440 9/12 db fg type N ant	..	310.00 249 ⁹⁵
ARX-270U	2m/440 9/12 db fg SO-239 ant	..	310.00 249 ⁹⁵

Twist, OSCAR BEAMS (Horiz/Vert Polarization)

A148-20T	2m 20el 10.8'bm 11.1db twist	..	\$133.00 109 ⁹⁵
22XB	2m 22el 19.3'bm 14db circ beam/relay	..	298.00 229 ⁹⁵
719B	432 19 el beam	..	142.00 119 ⁹⁵
729B	432 29 el beam	..	225.00 189 ⁹⁵
738XB	432 38el 14.3'bm 15.5db circ w/relay	..	276.00 219 ⁹⁵

PS-4A Remote polarity switch

PS-4A	Remote polarity switch	..Dfv	150.00 79 ⁹⁵
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BOOMER ANTENNAS

617-6B	6m Boomer, 6 el, 34' boom, 14 db	..	\$435.00 329 ⁹⁵
124WB	2m Boomer, 4 el, 4' boom, 10.2 db	..	73.00 64 ⁹⁵
13B2	2m Boomer, 13 el, 15' boom, 15.8 db	..	142.00 119 ⁹⁵
17B2	2m Boomer, 17 el, 31' boom, 18 db	..	246.00 199 ⁹⁵
26B2	2 13B2s vertically stacked	..	406.00 299 ⁹⁵
224WB	220 Boomer, 4 el, 3' boom, 10.2db	..	59.00 54 ⁹⁵
225WB	220 wideband Boomer, 15el, 10'bm, 15.5db	..	153.00 124 ⁹⁵

BOOMER STACKING KITS*

617-SK	Harness, pwr divider; 2 6176Bs	..Dmwf	\$160.00 59 ⁹⁵
22-SK	Harness, power divider; 2 13B2s	..	100.00 89 ⁹⁵
22N-SK	Harness, pwr divider; 2 17B2s	..	165.00 129 ⁹⁵
26B2-VPK	Vertical polar kit; 2 13B2s	..	175.00 139 ⁹⁵
220-SK	Harness, pwr divider; 2 220Bs	..Dwfv	98.00 29 ⁹⁵
220-QK	Quad stacking kit for 4 220Bs	..Dw	390.00 79 ⁹⁵
PD-2	Power divider for 2 13B2s	..	49.95
PD-2N	Power divider for 2 17B2s	..	91.00 84 ⁹⁵
PD-4	Power divider for 4 13B2s	..	63.00 56 ⁹⁵
PD-4N	Power divider for 4 17B2s	..	113.00 99 ⁹⁵
PD-224	Power divider; 4 220 Boomers	..Dmwf	61.00 19 ⁹⁵

*Prices are for stacking kits only

VHF/UHF BEAMS* (Horizontal polarization)

A50-3S	6m, 3 el, 6' boom, 8 db, stainless hdwre	..	\$110.00 99 ⁹⁵
A50-5S	6m, 5 el, 12' boom, 10 db, stainless hdwre	..	182.00 149 ⁹⁵
A50-6S	6m, 6 el, 20' boom, 11db, stainless hdwre	..	304.00 249 ⁹⁵
A148-10S	2m, 10' el wideband beam	..	85.00 79 ⁹⁵
A430-11S	430 MHz, 11 el, 4' boom, 13 db	..	69.00 64 ⁹⁵

*These antennas can be mounted vertically or horizontally!

HORIZONTAL STACKING KITS* (Adds 3 db)

A17-SK	For 2 A144-7S, 79" spacing	..Dmwf	\$ 48.00 14 ⁹⁵
A41-SK	For 2 A430-11S, 26" spacing	..Dmwf	48.00 14 ⁹⁵

*Prices are for stacking kits only

MOBILE ANTENNAS

CG-144A	2m 3/4" mt Gold series coil & whip only	..	\$114.00 99 ⁹⁵
CS-28M	10m magnet mt antenna	..	66.00 59 ⁹⁵
CS-50M	6m magnet mt 3 db antenna	..	66.00 59 ⁹⁵

CUSHCRAFT - continued

CS-50T	6m trunk lip mt 3 db ant	..Dmfv	64.00 34 ⁹⁵
CS-147M	2m magnet mt 3 db antenna	..	\$ 66.00 59 ⁹⁵
CS-147A	2m coil & whip only	..	44.95
CS-220	220 3/4" hole mt 3 db antenna	..Dwf	55.00 29 ⁹⁵
CS-220M	220 magnet mt 3 db antenna	..	66.00 59 ⁹⁵
CS-220T	220 trunk lip mt 3 db ant	..Dmfv	64.00 29 ⁹⁵
CS-1450M	440 1/4" wave mag mt ant	..Dw	42.00 24 ⁹⁵
CS-450	440 3/4" hole mt 5 db antenna	..Df	55.00 39 ⁹⁵
CS-450M	440 magnet mt 5 db antenna	..	66.00 59 ⁹⁵
CS-450T	440 trunk lip mt 5 db ant	..Dwf	64.00 49 ⁹⁵
CS-450A	440 coil & whip only	..Dwf	43.00 24 ⁹⁵

DUALBAND 2M/440 MOBILE ANTENNAS

CG-270A	2m/440 3/4" mt Gold series coil/whip only	..	\$114.00 99 ⁹⁵
CS-270M	2m/440 3.7/6 db magnet mt ant	..	87.00 79 ⁹⁵
CS-270A	2m/440 coil & whip only	..	60.00 54 ⁹⁵

MOUNTS ONLY FOR MOBILE ANTENNAS

CG-MG	Gold series magnetic mount	..	\$ 35.95
CG-MGN	Gold series mag mt w/N connector	..	35.95
CS-MG	Magnetic mount	..	29.95
CS-MGN	Magnetic mount w/N connector	..	29.95
CS-TL	Trunk lip mount	..	29.95

SKYWALKER HF BEAMS

40-2CD	40m, 2 el, 23' boom, 5.5 db	..Dmfv	\$626.00 449 ⁹⁵
20-4CD	20m, 4 el, 32' boom, 10 db	..Dwf	665.00 469 ⁹⁵
20-3CD	20m, 3 el, 20' boom, 8 db	..Dmfv	485.00 349 ⁹⁵
15-4CD	15m, 4 el, 20' boom, 10 db	..Dmfv	399.00 289 ⁹⁵
15-3CD	15m, 3 el, 14' boom, 8 db	..Dmfv	305.00 169 ⁹⁵
10-4CD	10m, 4 el, 16' boom, 10 db	..Dmfv	349.00 229 ⁹⁵

MULTIBAND VERTICAL ANTENNAS

AP-8A	80-10m 8-band rugged vert	..Dmfv	\$289.00 199 ⁹⁵
APR-18A	Radial kit	..Dwfv	70.00 49 ⁹⁵
R-6000	20/17/15/12/10/6m vertical	..	365.00 269 ⁹⁵
R-7000	40/30/20/17/15/12/10m vertical	..	510.00 379 ⁹⁵
R-800	80m kit for R-7000	..	155.00 129 ⁹⁵

ROTATABLE DIPOLES

D-3	20/15/10m World Ranger dipole	..	\$250.00 199 ⁹⁵
D-3W	30/17/12m rotatable dipole	..	250.00 199 ⁹⁵
D-4	40/20/15/10m World Ranger dipole	..	340.00 269 ⁹⁵
D-40	40m World Ranger dipole	..	305.00 239 ⁹⁵

BIG THUNDER TRI-BAND BEAMS

X-9	20/15/10m, 9 el, 28' boom, 13/14db	..	\$995.00 749 ⁹⁵
X-940	40m add-on kit for X-9	..	340.00 269 ⁹⁵
X-7	20/15/10m, 7 el, 18' boom, 12.5/13db	..	675.00 499 ⁹⁵
X-740	40m add-on kit for X-7	..	275.00 229 ⁹⁵

BIG THUNDER MONOBAND BEAMS

XM-240	40m, 2 el, 23' boom, 7 db	..	\$719.00 509 ⁹⁵
XM-520	20m, 5 el, 35' boom, 9.3db	..	789.00 559 ⁹⁵
XM-515	15m, 5 el, 24' boom, 9.3db	..	449.00 319 ⁹⁵
XM-510	10m, 5 el, 19' boom, 9.3db	..	329.00 229 ⁹⁵
TEN-3	10m, 3 el, 8' boom, 8 db	..	189.00 149 ⁹⁵

MULTIBAND BEAM ANTENNAS

A-3S	20/15/10m, 3el, 14'bm, 8db, stainless hdwr	..	\$497.00 349 ⁹⁵
A-743	40m or 10 MHz add-on kit; A-3/A-3S	..	159.00 129 ⁹⁵
A-4S	20/15/10m, 4el, 18'bm, 9db, stainless hdwr	..	597.00 429 ⁹⁵
A-744	40m or 10 MHz add-on kit; A-4/A-4S	..	159.00 129 ⁹⁵
A-3WS	17 & 12m, 3 el, 14' boom, 8 db	..	390.00 289 ⁹⁵
A-103	30m add-on kit for A-3WS	..	159.00 129 ⁹⁵
ASL-2010	13.5-32MHz 8el 18'bm 6.4db LP	..	828.00 599 ⁹⁵
AFB-2	160-10m 9-band balun	..Dwfv	60.00 29 ⁹⁵

LIGHTNING ARRESTORS

LAC-4	200w SO-239 gas tube arrestor	..	\$ 43.95
LAC-4H	2kw SO-239 gas tube arrestor	..	48.95
LAC-4N	200w type N gas tube arrestor	..	55.95
LAC-4NH	2kw type N gas tube arrestor	..	60.95
LC-2	Extra 200w cartridge for LAC-4/4N	..	19.95
LC-2KW	Extra 2kw cartridge for LAC-4H/4NH	..	21.95
5VB	Vinyl connector boots	..pack of 5	13.95

DCI (DCI)

145-2H	2m 144-146MHz 200w bandpass filter	..	\$ 89.95
146-4H	2m 144-148MHz 200w bandpass filter	..	89.95
223-5-3H	222-225MHz 200w bandpass filter	..	89.95

DCI - continued

2m/220 models w/N connectors add \$10	special order	
435-10C	430-440MHz 200w N bandpass filt	109.95
445-10C	440-450MHz 200w N bandpass filt	109.95

DC SALES (DCS)

Tenna Hitch	Antenna mount for trailer hitch	\$ 35.95
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DAIWA (DAI)

CS-201	2-position 600 MHz coax switch	..	\$ 24.95
CS-401	4-position 800 MHz coax switch	..	119.95
CN-101	1.8-150MHz SWR/power meter/light	..	89.95
CN-103M	140-525MHz SWR/power meter	..	99.95
CN-410M	3.5-150MHz 15/150w mob meter	..	89.95
CN-460M	140-450MHz 15/150w mob meter	..	89.95
DP-820	140-525MHz dig SWR/power	..Dw	315.95 249 ⁹⁵

DAVIS (DAV)

7400	Perception II indoor WX unit	..	\$150.00 129 ⁹⁵
7415	Wizard II-S weather station	..	150.00 129 ⁹⁵
7425	Wizard III weather station	..	195.00 169 ⁹⁵
7440	Monitor II weather station	..	395.00 349 ⁹⁵
7852	Rain Collector II, 0.01"	..	75.00 69 ⁹⁵
7977	Electronic rain counter, 0.01"	..	30.95
7859	External temp/humid Sensor II; 7440	..	125.00 109 ⁹⁵
7862	Weatherlink IBM interface/software	..	165.00 139 ⁹⁵
7866	Weatherlink Mac interface/software	..	165.00 139 ⁹⁵
7867	Weatherlink IBM conversion kit	..	40.95
7868	Weatherlink Mac conversion kit	..	40.95
7870	Modem adapter for 7862/7866	..	6.95
7873	Cig lighter power cord	..	9.95
7876-040	4-conductor 40' extension cable	..	18.95
7878-040	6-conductor 40' extension cable	..	22.95
7880	8-conductor 25' junction box cable	..	15.95
7881	8-conductor 50' junction box cable	..	25.95
7882	8-conductor 100' junction box cable	..	45.95
7890	Master mount for anemometer	..	16.95
0131	Weather forecasting quick reference card	..	9.95
0271	Turbo Meter handheld dig wind indicator	..	165.00 99 ⁹⁵
0281	Wind Wizard handheld wind indicator	..	44.95
7520	Stand alone 0.01" rain gauge/elec ctr Dm	..	95.00 59 ⁹⁵

DELORME (DEL)

Trimplate	Laptop PC GPS w/Street Atlas soft	\$ 149.95
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DIAMOND (DIA)

SWR/POWER METERS

SX-100	1.6-60 MHz 30/300/3kw PEP meter	..	\$144.95 134 ⁹⁵
SX-200	1.8-200 MHz 5/20/200w PEP meter	..	104.95 94 ⁹⁵
SX-400	140-525 MHz 5/20/200w PEP meter	..	124.95 114 ⁹⁵
SX-600	Dual band 1.8-160/140-525 200w PEP mtr	..	179.95 169 ⁹⁵
SX-1000	1.8-160/430-1300MHz 200w PEP meter	..	234.95 214 ⁹⁵

HT & HANDHELD SCANNER ANTENNAS

RH-3	2m/440 1.75" BNC mini HT duck	\$ 24.95
RH-77CA	2m/440 15" BNC rubber gain ant	24.95
RH-205	2m 3/4 wave telescopic HT antenna ...	24.95
RH-519	2m/440 8.3" flexible BNC whip	27.95
RH-707	2m/440 8 3/4" tiltable BNC whip	33.95
RH-951S	2m/440/1.2GHz 15" BNC slim duck	44.95
SRH-519	2m/440 8.3" flexible SMA whip	32.95
SRH-805	2m/440/1.2GHz 1.75" SMA ant	27.95
SRH-815	2m/440/1.2GHz 6" flex SMA whip	36.95

PRICE LIST

DIAMOND - continued

NR-770HNM 2m/440 3/5.5db 40" NMO mobile	56.95	
NR-770HBNM Blk 2m/440 3/5.5db 40" NMO	59.95	
NR-770RA 2m/440 3/5.5db 39" mobile ant ..	51.95	
NR-770SA 2m/440 2.15db 16.5" mobile ant ..	41.95	
NR-790A 2m/440 4.5/7.2db 57" mobile ant ..	82.95	
SG-7000A 2m/440 2.15/3.8db 19" mobile ..	69.95	
SG-7200NMO 2m/440 3/5.5db 38" NMO ant ..	86.95	
SG-7500A 2m/440 3.5/6db 41" mobile ant ...	79.95	
SG-7500NMO 2m/440 3.5/6db 41" NMO ant ...	79.95	
SG-7900A 2m/440 5/7.6db 62" mobile ant ...	124.95	114 ⁹⁵

TRI-BAND MOBILE ANTENNAS

CR-320A 2m/220/440 2.15/3.8/5.5db 36"	\$ 89.95	
CR-627B 6m/2m/440 2.15/4.5/7.2db 60" ant ..	109.95	99 ⁹⁵
CR-627BNMO 6m/2m/440 2.15/4.5/7.2db 60" ..	109.95	99 ⁹⁵
MV-3A 10/6/2m 57" UHF base mobile ant	84.95	
HVC-7 40m loading coil for MV-3A	39.95	
HVC-14 20m loading coil for MV-3A	37.95	
HVC-18 17m loading coil for MV-3A	37.95	
HVC-21 15m loading coil for MV-3A	27.95	
NR-2000NA 2m/440/1.2 3/6/9.7db 39" N mob	89.95	
SG-9600 6m/2m/440 2.1/2.15/5.2db 33" ant ..	92.95	
D-505 Mobile 40-1500MHz 20db receive ant ..	119.95	

MAGNET MOUNTS

DP-SPM/58U Mag mt w/RG-58U; 45" max	\$ 39.95	
DPK-4NM-M Hvy mag mt, Yaesu N, 45" max ..	45.95	
DPK-4NM-N Hvy dty mag mt, cbl, N, 45" max ..	45.95	
K-702M Hvy dty mag mt, 6 1/2" dia, 50" max ..	49.95	
MCR-M Mag mt HT base/coax/tilt BNC Dmwfv	44.95	
SPM-35 Hvy dty mag mt, cable, 45" max	39.95	

TRUNK LIP MOUNTING KITS

K-200 Folding hatch/tnk mt; NR/SG ants	\$ 34.95	
K-200KM Folding hatch/tnk mt/coax; NR/SG ..	62.95	
K-400 Hatch/trunk mt; NR/SG antennas	39.95	
K-400C Hatch/trunk mt w/coax; UHF mount ..	69.95	
K-400CNMO Hatch/trunk mt w/coax; NMO mt ..	69.95	
K-400-3/8C Trunk mount w/6" cable; 1/2-24 ...	69.95	
C-110 10' extension cable for K-400-3/8C ..	14.95	
K-400N Hatch/trunk mt w/coax & type N	74.95	
K-600M Tilt angle trunk mt w/cable	57.95	
K-600N Tilt angle tnk mt w/cable	74.95	59 ⁹⁵
K-600P Tilt angle trunk mt w/cable, Yaesu N ..	64.95	
K-601M SO-239 hideaway trunk mt, 6" coax ..	69.95	
K-601NMO NMO hideaway trunk mt, 6" coax ..	69.95	
C-110 10' extension cable for K-601 mts	14.95	
K-9000LRM Motorized luggage rack mount ...	109.95	
K-9000TDM Motorized trunk/hatchback mt	109.95	

GUTTER MOUNTS & KITS

K-300 Folding gutter mt; NR/SG antennas	\$ 39.95	
K-300C Gutter mt w/cable; UHF mount	69.95	
K-300KM Folding gutter mt w/coax; NR/SG	67.95	
K-300M Gutter mt w/coax; NR/SG ants ..Dmwfv	79.95	39 ⁹⁵

MIRROR & LUGGAGE RACK MOUNTS & KITS

K-540 Mirror/luggage rack mount	\$ 35.95	
K-540KM Mirror/luggage rack mt w/coax	59.95	
K-550 Luggage mt; new mini vans (use GLP) ..	44.95	
K-550KM Luggage mt w/SO-239 base/coax	69.95	

MOUNTING GROUP HARDWARE

C-101 SO-239 mt, 6.5' RG-316 low-loss coax ..	\$ 29.95	
C-101NMO NMO mt, 6.5' RG-316 low-loss coax ..	29.95	
C-110 10' ext cable; C-101/K-601/K-400-3/8C ..	14.95	
C-110BNC 10' extension cable to BNC male ..	22.95	
C-211 SO-239 mt, 6.5' coax, 10' coax extend ..	39.95	
C-213 SO-239 mt, 13.5' RG-316 low-loss coax ..	37.95	
GLP-5 UHF base mtg group hrdwr; mini coax ..	10.95	
GLP-5N UHF mtg grp hrdwr; mini coax, Yae N ..	13.95	
GLP-58 UHF base mounting group hardware ..	10.95	
NMO-UHF Adapter for NMO; not for SG, 45" max	17.95	

MULTIBAND HF BASE VERTICAL ANTENNAS

CP-5 80/40/20/15/10m 200w PEP 15' vert	\$309.95	279 ⁹⁵
CP-6 80/40/20/15/10/6m 200w PEP 15' vert ..	329.95	299 ⁹⁵

MONO-BAND BASE STATION ANTENNAS

CP-2E 2m 6.5db 9' base antenna	\$ 59.95	
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Reg Sale

DIAMOND - continued

DP-GH62 6m 6db 21' base antenna	157.95	147 ⁹⁵
F-22A 2m 6.7db 10.5' base antenna	99.95	
F-221 143.5-146.5MHz 6.7db 10.5' base ant ..	109.95	99 ⁹⁵
F-23A 2m 7.8db 15' base antenna	137.95	127 ⁹⁵
F-23C1 148-154MHz 7.8db 15' comm base ..	183.95	173 ⁹⁵
F-23J 143.5-146.5MHz 7.8db 15' base ant ...	172.95	159 ⁹⁵
F-142A 220 MHz 5.5db 6' base antenna	132.95	122 ⁹⁵
F-718A 440 11.5db 15' type N base antenna ..	229.95	209 ⁹⁵
F-718J 428-442MHz 11.5db 15' N base ant ..	239.95	219 ⁹⁵
F-718L 420-430MHz 11.5db ATN N base ant ..	239.95	219 ⁹⁵
F-1230A 1.2GHz 13.5db 10.5' type N base ant	169.95	159 ⁹⁵

DUAL-BAND BASE STATION ANTENNAS

U-200 440/1.2GHz 8.3/11.7db 6' N base ant ..	\$139.95	129 ⁹⁵
X-50A 2m/440 4.5/7.2db 5.6' base antenna ..	109.95	99 ⁹⁵
X-50A 2m/440 4.5/7.2db 5.6' base N ant ...	109.95	99 ⁹⁵
X-200A 2m/440 6/8db 8.3' base antenna	149.95	139 ⁹⁵
X-300A 2m/440 6.5/9db 10.2' base antenna ..	174.95	164 ⁹⁵
X-500HNA Hvy dty 2m/440 8.3/11.7db 17.8' N ant	259.95	239 ⁹⁵
X-510MA 2m/440 8.3/11.7db 17.2' base ant ..	209.95	189 ⁹⁵
X-510NA 2m/440 8.3/11.7db 17.2' type N ant ..	209.95	189 ⁹⁵
X-510NJ 143.5-146.5/428-442MHz 17.2' N ..	219.95	199 ⁹⁵
X-700HNA 2m/440 9.3/13db 24' type N ant ..	439.95	399 ⁹⁵
X-2200A 2m/220 6/7.8db 11.5' base ant	183.95	173 ⁹⁵

TRI-BAND BASE STATION ANTENNAS

D-130J 25-1300 MHz 200w discone ant	\$ 89.95	
U-5000A 2m/440/1.2GHz 4.5/8.3/11.7db 6' N	149.95	139 ⁹⁵
U-5002A 52-54MHz/2m/440 2.1/6.2/8.4db 8.3'	172.95	162 ⁹⁵
X-320A 2m/220/440 6.7/8.8db 10' base	229.95	209 ⁹⁵
X-600A 2m/440/1.2 6.5/9/10db 10.5' N	219.95	199 ⁹⁵
D-707E Base 40-1500MHz 20db receive ant ..	179.95	

DUPLEXERS & TRIPLEXERS

MX-37 HF 440/1.2 100/50w N duplexer	\$ 64.95	
MX-37N HF 440/1.2 100/50w N dplxr ....Dmwfv	60.95	49 ⁹⁵
MX-62M HF 6m/2m, 12" cables duplexer	74.95	
MX-72D HF 2m/440 400/150/100w duplexer ..	43.95	
MX-72DN As MX-72D/type N on 440 ....Dwfv	52.95	
MX-72H As MX-72D, w/12" cables	46.95	
MX-72N As MX-72D, type N on 440, 12" cables	49.95	
MX-214 2m/220 150/100w w/12" cables	69.95	
MX-214D As MX-214, no cables	69.95	
MX-324 2m/220/440 triplexer	99.95	
MX-324D As MX-324, no cables	99.95	
MX-2000 HF 6m/2m/440 400/200/250w triplexer	84.95	
MX-2000D As MX-2000, no cables	79.95	
MX-3000 HF 2m/440/1.2 400/200/100w triplexer	79.95	
MX-3000D As MX-3000, no cables	79.95	
MX-3000N As MX-3000, type N, 12" cables ..	85.95	

ACCESSORIES

CA-35R DC-500MHz 400w lightning protect ..	\$ 29.95	
CX-210A 1.5kw DC-1000MHz coax switch	44.95	
CX-210N 1.5kw DC-1500MHz N coax switch ..	74.95	
CX-310A HD 3-pos DC-800MHz coax switch ..	83.95	
DL-30A 15/100w peak 0-500MHz dummy load ..	27.95	
HB-300 Remote head mount for Xcvr	59.95	
HB-400 HT air vent dash mount	19.95	
HB-450 HT adjustable air vent dash mount ...	54.95	
HB-500 Remote head air vent dash mount ...	22.95	
HB-650 HT door mt; side wind/glv bx ..Dmwfv	69.95	

Diamond Systems (DSY)

IBM LICENSE COURSE; THEORY/REGULATIONS/CODE

DSI-IBM-N Novice Class License software	\$ 49.95	39 ⁹⁵
DSI-IBM-T Technician Class License software ..	44.95	34 ⁹⁵
DSI-IBM-G No Code Tech Class License software	59.95	49 ⁹⁵
DSI-IBM-NC General Class License software ..	44.95	34 ⁹⁵
DSI-IBM-A Advanced Class License software ..	59.95	49 ⁹⁵
DSI-IBM-E Extra Class License software	59.95	49 ⁹⁵

DIGIMAX (DIG)

D-612 1.2 GHz 9-dig counter; .1 PPM ....Dw	\$259.95	199 ⁹⁵
B-12 Dry cell holder, switch; D-612 Dmwfv ..	10.95	6 ⁹⁵
BAC-5 Nicad pack; D-500/D-510A ..Dmwfv	29.95	19 ⁹⁵
BAC-12 Nicad pack; D-612/D-1200 Dmwfv ..	34.95	24 ⁹⁵

Reg Sale

DIGIMAX - continued

RF-500X Inline RF sampler, 250w ....Dwfv	39.95	29 ⁹⁵
T-1200 21" BNC telescopic antenna ..Dmwfv	8.95	

DRAKE (DRA)

TR-270 25w 2m FM Xcvr/ps/440 rcvr/TTT	\$999.95	
DEMOC-270 Multimode demodulator kit	99.95	
TNC-270 9600 bps terminal mode controller ..	249.95	
R-8A Shortwave receiver	1099.00	999 ⁹⁵
R-8B Shortwave receiver	1199.95	
MS-8 1592 Speaker	49.95	
1590 35-55, 108-174 MHz VHF converter ...	219.95	
7851 R-8A technical manual	39.95	
1591 Interface computer soft; orig R-8 Dmwfv	59.00	9 ⁹⁵
SW-8 Shortwave receiver	799.95	
1595 Carrying case for SW-8	49.95	
SW-1 Shortwave receiver	299.95	
SW-2 Shortwave receiver	499.95	
MS-8 1592 Speaker for SW-2	49.95	
1334 Mobile mount kit for SW-1/SW-2	15.95	
1594 Remote control for SW-2	49.95	
2051 Tilt/carry handle for SW-1/SW-2	4.95	

EASY-UP (UPS OK) (EAS)

EZ 48-3ABX 3' boxed tripod w/pitch pad kit ..	\$ 24.95	
EZ 48-5ABX 5' boxed tripod w/pitch pad kit ..	34.95	

EDCO (EDC)

TX-146 2m 50w 40db 3-stage helical filt Dm	\$ 89.95	39 ⁹⁵
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EIMAC TRANSMITTING TUBES (EIM)

3CX800A7	special order	\$499.95
3CX1200A7	special order	669.95
4CX250B/7203	special order	159.95
8873	special order	489.95
8874/3CX400A7	special order	469.95
8875	special order	599.95
8877/3CX1500A7	special order	1099.95

ALSO see TUBES

FORBES GROUP (FOR)

VT-14 2m Ventenna 3' 2.6 db base ant	\$ 49.95	
VT-15S Scanner Ventenna 3' 2.6 db base	49.95	
VT-22 220 Ventenna 25" 2.6 db base ant	49.95	
VT-27 2m/440 Ventenna base antenna	74.95	
VT-44 440 Ventenna 14" 2.6 db base ant	49.95	

Gamber-Johnson (GAM)

SS-100 Super slide mount w/ant plug	\$100.22	69 ⁹⁵
SS-101 Extra base for SS-100	42.95	

GAP VERTICALS (GAP)

DX-VIII Challenger 80/40/20/15/12/10/6/2m 31.5'	\$259.95	
Challenger Counterpoise	25.95	
(SYN) 100' 3/4" black double braided rope ..	6.95	
DX-VI Eagle 40/20/17/15/12/10m 21.5' rigid ..	269.95	
DX-IV Voyager 160/80/40/20m 45'; use 350' guy	399.95	
Voyager Counterpoise	50.95	
(SYN) 350' 3/4" black double braided rope ..	39.95	
Titan DX 80/40/30/20/17/15/12/10m, 25' ...	299.95	
100' Guy Kit with clamp	14.95	
200' Guy Kit with clamp	22.95	

GARMIN (GAR)

GPS-12XL GPS receiver	\$386.35	269 ⁹⁵
010-10165-00 PC cb/cig adapt; GPS-12XL ..	45.95	
GPS-38 GPS receiver	200.89	149 ⁹⁵
010-10048-00 Mounting bkt; GPS-12XL/38 ..	31.95	
010-10084-00 Cig lighter adapter; GPS-38 ..	39.95	
010-10164-00 PC cb/cig adapter; GPS-38 ..	50.95	
GPS-III GPS handheld mapping unit	571.80	369 ⁹⁵
GA-26 Low prof remote ant/cable; GPS-III ..	99.98	89 ⁹⁵
010-10082-00 Pwr/data cbl; GPS-12XL/III ..	27.95	
010-10085-00 Cig adapter; GPS-12XL/III ..	23.95	
010-10111-00 Mounting bkt; GPS-III	31.95	
010-10117-00 Carrying case	12.95	
010-10141-00 PC interface cable	38.95	

GARMIN - continued

	Reg	Sale
StreetPilot 12 ch GPS receiver	699.99	549 ⁹⁵
GENESYS (GEN)		
ADP-1 Chrome NMO to SO-239 adapt	\$ 17.95	9 ⁹⁵
B-35 2m/440 15' duck	27.95	14 ⁹⁵
CT-221E Eartalk mic/amp/gain controls	84.95	6 ⁹⁵
NMO Mount NMO mount w/16' mount	10.95	4 ⁹⁵
QS-110 Spkr/mic; Alnico/icom/Yaesu	29.95	16 ⁹⁵
QS-110K Speaker/mic for Kenwood	29.95	12 ⁹⁵
RS-402 5/20/200w 125-525 SWR/pwr	139.95	89 ⁹⁵
SY-25D VHF/UHF duplexer	34.95	29 ⁹⁵
T-05 Throat mic with split plugs	84.95	49 ⁹⁵
T-05K Throat mic for Kenwood	84.95	49 ⁹⁵

GLEN MARTIN (GME)

RT-424 4.5' roof-top tower, 6 sq ft 85 mph ...	\$159.95	
RT-832 8' roof-top tower, 8 sq ft 85 mph ...	229.95	
RT-936 9' roof-top tower, 18 sq ft 85 mph ...	389.95	
RT-1832 17.5' roof-top tower, 12 sq ft 85 mph ...	524.95	
LB-3755 Set of 8 1/2" x 5" lag bolts	9.95	
RA-6024 24" side arm for roof tower	59.95	
RA-6048 48" side arm for roof tower	76.95	
M-1330A 30' alum twr 12 sq ft/Hazer/10' mast T	1615.95	
M-1340A 40' alum twr 12 sq ft/Hazer/10' mast T	1832.95	
M-1840A 40' alum twr 16 sq ft/Hazer/10' mast T	2150.95	
M-1850A 50' alum twr 16 sq ft/Hazer/10' mast T	2410.95	
M-1860A 60' alum twr 15 sq ft/Hazer/10' mast T	3356.95	
M-1870A 70' alum twr 15 sq ft/Hazer/10' mast T	3660.95	
KB-1000 57" side arm; M-13 series	81.95	
KB-1300 57" side arm; M-18 series	81.95	
LR-8400 Lightning rod kit (complete)	148.95	
CW-2540 25' #4 bare copper ground wire	19.95	
CW-5040 50' #4 bare copper ground wire	38.95	
CW-7540 75' #4 bare copper ground wire	57.95	
CW-1040 100' #4 bare copper ground wire	76.95	
CW-1240 125' #4 bare copper ground wire	95.95	
CW-1540 150' #4 bare copper ground wire	115.95	
MC-10 Mast clamp; 2 required	24.95	
ES-40 4" dia x 30" earth screw	15.95	
ES-60 6" dia x 48" earth screw	25.95	
ES-80 8" dia x 66" earth screw	57.95	
GR-4400 Ground rod wire clamp	6.95	
GR-5080 8' x 3/8" ground rod	19.95	
H-2 175 lb load 12 sq ft HD aluminum Hazer	359.95	
H-3 150 lb load 8 sq ft std aluminum Hazer	269.95	
H-4 200 lb load 16 sq ft galv steel Hazer	344.95	
BW-8001 Brake hitch for H-2/3/4	73.95	
HR-2040 Roller bearing set; H-2/3/4	59.95	
HR-6010 TFX plates for H-2/4/5/6	21.95	
HR-6040 Bearing block set; H-5/6	44.95	
HS-1301 Side arm for H-2/3/4/5	44.95	
HP-3000 Kevlar guy cable, 3000# .....	.95	
HP-4500 Kevlar guy cable, 4500#	1.49	
M-1049 9' 1.92" OD galv steel mast	58.95	
MA-1040* 10' 1.92" OD aluminum mast	74.95	

*Truck, freight collect on MA-1040

MA-1049 9' 1.92" OD aluminum mast	68.95	
MA-1050 5' 1.92" OD aluminum mast	55.95	
MA-2069 9' 2.376" OD aluminum mast	99.95	
MA-5050 5' 1.33" OD aluminum mast	36.95	
ML-1800 Messenger line kit; Glen Martin towers	69.95	
ML-2500 Messenger line kit; Rohn towers	69.95	
TB-25 Thrust bearing (2 sealed bearings)	89.95	
TB-3806 3/8" x 6" galv turnbuckle	15.95	
TB-5009 3/8" x 9" galv turnbuckle	19.95	
TB-6212 3/8" x 12" galv turnbuckle	35.95	
TL-0470 Terminal lug	2.95	
VH-60 Hazer - for 60' Rohn 45G	1350.95	
VH-70 Hazer - for 70' Rohn 45G	1455.95	
VH-90 Hazer - for 50' Rohn 55G	1265.95	
VH-90 Hazer - for 60' Rohn 55G	1385.95	
VH-90 Hazer - for 70' Rohn 55G	1490.95	

All listed GLEN MARTIN items are shipped PREPAID (except MA-1040) (Glen Martin's expense) direct to you from the factory (48 states). We prefer payment in full with order, however, we will accept your credit

GLEN MARTIN - continued

card with the understanding that we will process the charge when we order the merchandise from the factory. This means that you may be billed before you receive your order. Please allow sufficient delivery time. Most truck lines will not unload towers, so please be sure to have enough manpower and/or equipment on hand.

L.L. GRACE (GRA)

KCT Kansas City Tracker satellite package	\$229.95	
KCT/T Kansas City Tracker package/KC Tuner	319.95	

GROVE (GRV)

ANT-20 No-Tenna Inside car rcv ant	\$ 19.95	9 ⁹⁵
BOK-16 Listener's Lawbook	9.95	
BOK-104 Antenna Factbook	9.95	

GRUNDIG (GRU)

Yacht Boy 305 Port AM/FM/SW/LW Rcvr	\$139.95	119 ⁹⁵
Mini World 100 Mini AM/FM/SW receiver	59.95	49 ⁹⁵
Traveller II Port AM/FM/SW/LW Rcvr/clock	99.95	69 ⁹⁵
Traveller III Digital AM/FM/SW/LW receiver	149.95	139 ⁹⁵
Yacht Boy 400 Port AM/FM/SW/LW Rcvr	219.95	189 ⁹⁵
G-400ACA AC adaptor for Yacht Boy 400	12.95	

HAL (HAL)

DSP-4100 HF DSP modem	special order	1295.00	1099 ⁹⁵
P-38 HF DSP modem	395.00	295 ⁹⁵	
ST-8000 HF modem	special order	3495.00	3269 ⁹⁵

HEIL (HEI)

PRO-SET-4 Deluxe boom mic/headset/HC-4	\$131.95	
PRO-SET-5 Deluxe boom mic/headset/HC-5	131.95	
PRO-MICRO-4 Boom mic/headset/HC-4	105.95	
PRO-MICRO-5 Boom mic/headset/HC-5	105.95	
PRO-5-4 Boom mic/single headset (HC-4)	120.95	
PRO-5-5 Boom mic/single headset (HC-5)	120.95	
AD-1-I Pro-Set 8-pin adapter cord for Icom	14.99	
AD-1-K Pro-Set 8-pin adapt cord; Kenwood	14.99	
AD-1-T Pro-Set 8-pin adapt cord; Ten-Tec	14.99	
AD-1-Y Pro-Set 8-pin adapter cord; Yaesu	14.99	
AD-1-I-M Pro-Set modular adapt cord; Ico	14.99	
AD-1-K-M Pro-Set modular adapt cord; Ken	14.99	
AD-1-Y-M Pro-Set modular adapt cord; Yae	14.99	
FS-1 Foot switch	26.95	
HS-1 Hand switch	20.95	
HC-4 DX'er's 'dream machine' mic element	29.95	
HC-5 Mic element for Icom SM-5/SM-6	29.95	

HMP In-line microphone preamp; Icom	54.99	
HMP-M In-line mic pre/prod; IC706/MKII	54.99	
HM-10-4 Microphone with HC-4 element	63.96	
HM-10-5 Microphone with HC-5 element	63.96	
HM-10-Dual Mic w/HC-4 & HC-5 elements	112.96	

CC-1-I HM-10 8-pin cable for Icom	25.99	
CC-1-K HM-10 8-pin cable for Kenwood	25.99	
CC-1-T HM-10 8-pin cable for Ten-Tec	25.99	
CC-1-Y HM-10 8-pin cable for Yaesu	25.99	
CC-1-I-M HM-10 modular cable for Icom	25.99	
CC-1-K-M HM-10 modular cable; Kenwood	25.99	
CC-1-Y-M HM-10 modular cable for Yaesu	25.99	

MA-1 Clamp and arm for HM-10	49.99	
TB-1 Table base mic stand for HM-10	19.95	
Boom Clip for BM-series	5.95	
Ear Pads for BM-series	5.95	

Ham Radio Handbook	12.95	
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HUSTLER (HUS)

RM-80 80m CW 400w PEP resonator	\$ 26.95	
RM-75 75m phone 400w PEP resonator	26.95	
RM-40 40m 400w PEP resonator	24.95	
RM-30 30m 400w PEP resonator	24.95	
RM-20 20m 400w PEP resonator	21.95	
RM-17 17m 400w PEP resonator	21.95	
RM-15 15m 400w PEP resonator	15.95	
RM-12 12m 400w PEP resonator	15.95	
RM-11 11m 400w PEP resonator	15.95	
RM-10 10m 400w PEP resonator	15.95	
RM-80S 80m CW 2kw PEP resonator	49.95	

HUSTLER - continued

RM-75S 75m phone 2kw PEP resonator	49.95	
RM-40S 40m 2kw PEP resonator	35.95	
RM-20S 20m 2kw PEP resonator	28.95	
RM-15S 15m 2kw PEP resonator	24.95	
RM-11S 11m 2kw PEP resonator	23.95	
RM-10S 10m 2kw PEP resonator	23.95	
MO-1 54" mast for fender or deck mount	31.95	
MO-2 54" mast for bumper mount	31.95	
MO-3 54" no break-over mast	23.95	
MO-4 22" mast for special applications	19.95	
VP-1 Tri-band adapter	5.95	
RSS-2 Resonator spring	9.95	
QD-2 Stainless quick disconnect	19.95	
L-14-144 12' RG-58, PL-259 to lugs	9.95	
L-14-240 20' RG-58, PL-259 to lugs	12.95	

STAINLESS 2" MOBILE BALL MOUNTS

SSM-1 Ball & spring, cadmium hardware	\$ 46.95	
SSM-2 Ball, cadmium hardware	26.95	
SSM-3 Stainless steel spring	24.95	

1-1/2" MOBILE BALL MOUNTS

C-32 Chrome plated ball	\$ 11.95	
C-30 Chrome plated spring	11.95	
C-29 Stainless steel spring	17.95	
BM-1 Single strap bumper mt w/C-32	21.95	

3/8-24 THREAD MOBILE MOUNTS

HLM Trunk lip mount w/swivel	\$ 22.95	
HDT Hustloff trunk lip mt w/swivel	23.95	
MBM Super magnet mount w/16' coax	19.95	
MM-3 Universal mount with 17' coax	21.95	
RVM Recreational vehicle mount	20.95	
TGM-1 Trunk grove mount	Dfv	12.95
TLM Trunk lip mount	21.95	

HF ANTENNAS

4-BTV 40/20/15/10m 21' trap vertical	\$166.95	119 ⁹⁵
5-BTV 80/40/20/15/10m 25' trap vertical	211.95	149 ⁹⁵
30-MTK 30m trap kit for 4-BTV/5-BTV	41.95	
6-BTV 80/40/30/20/15/10m 24' trap vert	246.95	179 ⁹⁵

VHF/UHF BASE STATION ANTENNAS

GG-144B 2m 6 db 10' vertical antenna	\$149.95	114 ⁹⁵
GG-270R 2m/440 6db 7.6' base station ant ..	209.95	159 ⁹⁵
GG-144 2m 7 db 15' vertical antenna	209.95	159 ⁹⁵
GG-720 220 MHz 7 db 10' vertical antenna ..	199.95	149 ⁹⁵
GG-440 440 MHz 6 db 7' vertical antenna	186.95	139 ⁹⁵

BUSINESS BAND ANTENNAS

GG-150-3 7db 161-168 MHz base ant	\$229.95	99 ⁹⁵
GG-150-4 7db 167-174 MHz base ant	229.95	99 ⁹⁵
GG-450-1 6db 450-458 MHz base ant	209.95	99 ⁹⁵
GG-450-4 6db 470-478 MHz base ant	209.95	99 ⁹⁵

VHF MOBILE ANTENNAS

BBL-144A 2m FM 3/4" hole mt antenna, 3.4db	\$ 39.95	
BBL-144A 2m FM trunk lip mt ant, 3.4 db ..	47.95	
CG-144 2m FM 3/4-24 ant, 7' high, 5.2 db ..	31.95	
CGT-144 2m FM trunk mt ant, 7' high, 5.2db	51.95	
CG-220 220 FM 3/4-24 ant, 5.2 db	31.95	
CGT-220 220 MHz 5.2 db trnk mt ant	51.95	
FX-2 2m FM 3.4 db magnetic mt antenna ..	33.95	
FX-2B 2m FM 3.4 db black mag mt antenna	38.95	
FX-220 220 FM 3.4 db magnetic mt ant	33.95	
FX-220B 220 FM 3.4 db black mag mt ant ..	38.95	
MKR-2 Radial kit for SF-2/CG-144	20.95	
RX-2 2m FM 3.4db magnetic mount ant	24.95	
RX-220 220 FM 3.4db magnetic mt antenna	24.95	
RX-440 440 FM 5 db magnetic mt antenna ..	24.95	
SF-2 2m FM 3/4-24 ant, 4' high, 3.4 db	14.95	
SF-220 220 MHz 3/4-24 antenna, 3 db	14.95	9 ⁹⁵
THF 140-500 MHz 1/2 wave trunk mount ant ..	23.95	
UHF 140-500 MHz 1/2 wave BNC mag mt ant ..	21.95	
UHT-1 140-500 MHz 1/2 wave roof mt ant	14.95	

HY-GAIN (HYG)

TRI-BAND BEAMS (20-15-10m)

398S TH1DXS 11el 20/17/15/12/10m, 24' bm	1079.95	899 ⁹⁵
391S TH7DXS 7 el, 24' boom w/balun	811.95	689 ⁹⁵

PRICE LIST

HY-GAIN - continued

393S TH5MK2S 5 el, 19' boom w/balun	696.43	589 ⁹⁵
395S Explorer 14 4 el, 14' boom w/balun	538.95	459 ⁹⁵
396S QK-710 10MHz or 40M EX add-on	165.95	154 ⁹⁵
398S TH3MK4 3 el, 14' boom	433.95	369 ⁹⁵
221S-1 TH3JRS 3 el, 12' boom, 750w PEP	324.95	289 ⁹⁵
390S TH2MK3S 2 el, 6' boom	337.95	279 ⁹⁵
DB-1217 12/17m 14' boom beam	401.95	339 ⁹⁵

MONOBAND BEAMS

371S Discoverer 7-1 30 or 40m rotatable dipole	\$263.95	229 ⁹⁵
372S Discoverer 7-2 40m 2 el 23' boom	601.95	509 ⁹⁵
373S Discoverer 7-3 3rd el; 372S; 35' boom	371.95	314 ⁹⁵
377S-1 205CA 20m 5 el, 34' boom	661.95	559 ⁹⁵
394S 204BAS 20m 4 el, 26' boom	481.95	399 ⁹⁵
226S 203BAS 20m 3 el, 16' boom	292.95	249 ⁹⁵
376S 155B/CAS 15m 5 el, 26' boom	380.95	319 ⁹⁵
236S 153BAS 15m 3 el, 12' boom	182.95	169 ⁹⁵
375S 105B/CAS 10m 5 el, 24' boom	251.29	229 ⁹⁵
239S-1 103BAS 10m 3 el, 8' boom	131.95	124 ⁹⁵
1009AA LP-1009AA 13-30 MHz 12 el LP Δm	1321.95	999 ⁹⁵

MULTI-BAND VERTICALS

188S DX-88 80-10m 8-band 25' vert	\$346.95	299 ⁹⁵
189S GRK-88 Ground radial kit	81.95	
190S RRR-88 Roof radial kit	99.95	
191S 160MK-88 160m kit for 188S	178.95	159 ⁹⁵
DX-77 40-10m 750w 7-band 29' no radials vert	421.95	359 ⁹⁵
LC-160Q 160m loading coil; 182S Δmwv	94.95	79 ⁹⁵
385S 14AVQ/WBS 40/20/15/10m, 18'	159.95	144 ⁹⁵
384S 12AVQS 20/15/10m, 13.5' high	114.95	104 ⁹⁵
184 14RMQ Roof kit-12/14VQ, 18AVT Δwfv	71.95	39 ⁹⁵
193S 18VS 80-10m trapless vert, 18' high	74.95	69 ⁹⁵

MULTI-BAND DOUBLET

380S 2BDQS 80/40m 101' trap doublet	\$120.95	109 ⁹⁵
383S 58DQS 80/20/15/10m 94' trap Δwf	235.95	195 ⁹⁵
381S 19PD 80-10 233' 1-band port dip Δmwfv	263.95	199 ⁹⁵

VHF/UHF BASE STATION ANTENNAS

343S 66DX 6m 6 el beam, 24' boom	\$231.95	209 ⁹⁵
230S-1 64DX 6m 4 el beam, 12' boom	122.95	109 ⁹⁵
232S 215DX 2m 15 el beam, 28' boom Δmwfv	206.95	139 ⁹⁵
214S-1 214FM 2m 14 el beam, 15' boom	81.95	
208S-1 28FM 2m 8 el beam, 12' boom Δv	71.95	59 ⁹⁵
205S-1 25FM 2m 5 el beam, 6' boom	51.95	
203S-1 23FM 2m 3 el beam, 3.5' boom	41.95	
231S 70-31DX 430 31 el beam, 24' bm Δmwfv	203.95	149 ⁹⁵
V-6R 6m 3db deluxe base antenna	189.95	174 ⁹⁵
338 GPG2B 2m ground plane ant	43.95	
331S V-42R 2m/440 type N base ant Δmwfv	154.95	119 ⁹⁵
335S-1 V-2R 2m ground plane ant	99.95	92 ⁹⁵
V-3R 220 ground plane antenna	101.95	94 ⁹⁵
337S-1 V-4R 440 ground plane ant	97.95	89 ⁹⁵

OSCAR LINK ANTENNAS

216S 216SAT 2m 16el 145.9MHz bm Δfv	\$218.95	159 ⁹⁵
215S 7030SAT 435 MHz 30 el beam Δfv	211.95	149 ⁹⁵
217 60" x 1/2" fiberglass crossboom Δf	71.95	49 ⁹⁵
218S OSCAR Link Complete Oscar ant sys	487.95	409 ⁹⁵

ACCESSORIES

155 CI Center insulator for doublets	\$12.95	
156 El 7" doublet end insulators pair	6.95	
157S CIC Dipole center insulator w/SO-239	23.95	
242S BN-86 80-10m balun	36.95	
243S BN-4000 4kw PEP 160-10m beam balun	93.95	89 ⁹⁵
244S BN-4000 4kw PEP 160-10m dipole balun	93.95	89 ⁹⁵
2400-155 62400155 Boom mic/headset Dmwfv	113.95	79 ⁹⁵

HY-GAIN CRANK-UP TOWER ACCESSORIES

117 HG-10 10' 2" OD .120 wall steel mast Δw	\$102.95	49 ⁹⁵
121B HG-TBT Trestle bearing w/sleeve Δwf	88.95	
122 HG-COA Coax arm; legs 1"-1 1/2" Δwf	23.95	

HY-GAIN ANTENNA ROTORS

305 AR-40 Solid state light duty rotor	\$262.95	239 ⁹⁵
302 CD-45-II Medium duty rotor	369.95	339 ⁹⁵
302-2 CD-45-II 220v medium duty rotor	369.95	339 ⁹⁵
304 HAM IV Heavy duty rotor	529.95	449 ⁹⁵

HY-GAIN - continued

307 HAM V Pathfinder Digital HD rotor	899.95	789 ⁹⁵
303 T-X Tailwister extra heavy duty rotor	619.95	539 ⁹⁵
303-2 T-X 220v Tailwister extra HD rotor	619.95	539 ⁹⁵
303D Pathfinder Tailwister dig extra HD rotor	970.95	839 ⁹⁵
300 HDR-300/A Deluxe digital hvy duty rotor	1222.95	1049 ⁹⁵
306 DCU-1 Digital rotor control; HAM IV/T-X	619.95	539 ⁹⁵

OPTIONAL ACCESSORIES FOR ROTORS

51467-10 MSHD Lwr mast support; HAM IV/T-X	\$81.95	
51472-10 TSLD Lwr mast support; CD45II/AR40	28.95	
50559-10 MSP-1 Tower spacing kit Δmw	23.95	9 ⁹⁵

See BELDEN for rotor cable

ICOM (ICO)

IC-781 Xcv/Rcv/ps/tuner/scope ...spec order	8000.00	6599 ⁹⁵
FL-103 2.8 KHz SSB filter	123.00	109 ⁹⁵
UT-36 Voice synthesizer	74.95	
IC-7750DSP Xcvr/ps/keyer/auto tuner/IF-DSP	4300.00	3599 ⁹⁵
CR-282 High stability crystal unit	168.00	149 ⁹⁵
FL-53A 250 Hz CW filter (2nd IF)	245.00	199 ⁹⁵
FL-101 250 Hz CW filter (1st IF)	133.00	119 ⁹⁵
FL-102 6 KHz AM filter	94.95	
FL-222 1.9 KHz 455 KHz IF SSB filter	249.00	199 ⁹⁵
FL-223 1.9 KHz 9 MHz IF SSB filter	105.00	99 ⁹⁵
FL-232 350 Hz CW/RTTY filter	113.00	104 ⁹⁵
HM-36 Scanning hand mic	74.95	
MB-19 Rack mounting handles	74.95	
SM-6 Desk microphone	128.00	119 ⁹⁵
SM-8 2-connector desk mic/up/down scan	200.00	169 ⁹⁵
SM-20 Deluxe desk microphone	259.00	219 ⁹⁵
SP-20 Speaker w/audio filter	310.00	249 ⁹⁵
SP-21 External speaker	138.00	119 ⁹⁵
UT-66 Voice synthesizer	83.95	
IC-756 Xcvr/Rcvr/6m/IF-DSP/tuner/keyer	3056.00	1999 ⁹⁵
PS-85 Switching power supply	406.00	299 ⁹⁵
AH-4 80-6m 120w automatic ant tuner	348.00	319 ⁹⁵
AH-2B Bumper mt & whip	379.00	299 ⁹⁵
CR-502 High stability oscillator crystal	95.95	
Suggest dealer installation of CR-502		
FL-52A 500 Hz CW filter	245.00	199 ⁹⁵
FL-53A 250 Hz CW filter	245.00	199 ⁹⁵
FL-100 500 Hz CW filter	133.00	119 ⁹⁵
FL-101 250 Hz CW filter	133.00	119 ⁹⁵
FL-222 1.9 KHz 455 KHz IF SSB filter	249.00	199 ⁹⁵
FL-223 1.9 KHz 9 MHz IF SSB filter	105.00	99 ⁹⁵
FL-232 350 Hz CW/RTTY filter	113.00	104 ⁹⁵
SM-8 2-connector desk mic/up/down scan	200.00	169 ⁹⁵
SM-20 Deluxe desk microphone	259.00	219 ⁹⁵
SP-20 Speaker w/audio filter	310.00	249 ⁹⁵
SP-21 External speaker	138.00	119 ⁹⁵
UT-102 Voice synthesizer	74.95	
IC-746 Xcvr/Rcvr/6m/2m/IF-DSP/tuner/mic	2280.00	1869 ⁹⁵
PS-85 Switching power supply	406.00	299 ⁹⁵
AH-4 80-6m 120w automatic ant tuner	348.00	319 ⁹⁵
AH-2B Bumper mt & whip	379.00	299 ⁹⁵
CR-282 High stability crystal unit	168.00	149 ⁹⁵
CT-17 CI-V level converter	169.00	139 ⁹⁵
RS-746 Win remote control software	79.95	
OPC-478 PC to radio connection cable	45.95	
FL-52A 500 Hz CW filter	245.00	199 ⁹⁵
FL-53A 250 Hz CW filter	245.00	199 ⁹⁵
FL-100 500 Hz CW filter	133.00	119 ⁹⁵
FL-101 250 Hz CW filter	133.00	119 ⁹⁵
FL-103 2.8 KHz SSB filter	123.00	109 ⁹⁵
FL-222 1.9 KHz 455 KHz IF SSB filter	249.00	199 ⁹⁵
FL-223 1.9 KHz 9 MHz IF SSB filter	105.00	99 ⁹⁵
FL-232 350 Hz CW/RTTY filter	113.00	104 ⁹⁵
SM-8 2-connector desk mic/up/down scan	200.00	169 ⁹⁵
SM-20 Deluxe desk microphone	259.00	219 ⁹⁵
SP-21 External speaker	138.00	119 ⁹⁵
UT-102 Voice synthesizer	74.95	
CR-64 High stab oscillator xtal; 728 Δmwf	156.00	139 ⁹⁵
MB-49 Mobile mounting bkt; IC-738 Δmwf	59.95	49 ⁹⁵
UI-7 AM/FM module for IC-728 Δv	119.00	109 ⁹⁵
IC-707 Xcvr/SW Rcvr w/mic	859.00	729 ⁹⁵

ICOM - continued

PS-85 Switching power supply	406.00	299 ⁹⁵
AH-4 80-6m 120w automatic ant tuner	348.00	319 ⁹⁵
AH-2B Bumper mt & whip	379.00	299 ⁹⁵
CR-338 High stability crystal unit	81.95	
FL-52A 500 Hz CW filter	245.00	199 ⁹⁵
FL-53A 250 Hz CW filter	245.00	199 ⁹⁵
MB-5 Mobile mount	59.95	
SM-6 Desk microphone	128.00	119 ⁹⁵
SP-3 External speaker	140.00	119 ⁹⁵
SP-7 Small external speaker	94.95	
SP-20 Speaker w/audio filter	310.00	249 ⁹⁵
SP-21 External speaker	138.00	119 ⁹⁵
UI-9 FM module	113.00	104 ⁹⁵
UT-30 Tone encoder	55.95	
IC-706 Mk II Mini Xcvr/SW Rcvr w/6 & 2m	1599.00	1299 ⁹⁵
\$100 instant coupon - IC-706 Mk II thru 6/30/98		
OPC-581 cable FREE direct from Icom thru 6/30/98!		
PS-85 Switching power supply	406.00	299 ⁹⁵
AH-4 80-6m 120w automatic ant tuner	348.00	319 ⁹⁵
AH-2B Bumper mt & whip	379.00	299 ⁹⁵
AT-180 Auto antenna tuner; HF+6m	749.00	499 ⁹⁵
OPC-598 23' extension cable for AT-180	73.95	
FL-100 500 Hz CW filter	133.00	119 ⁹⁵
FL-101 250 Hz CW filter	133.00	119 ⁹⁵
FL-103 2.8 KHz SSB filter	123.00	109 ⁹⁵
FL-223 1.9 KHz 9 MHz IF SSB filter	105.00	99 ⁹⁵
FL-232 350 Hz CW/RTTY filter	113.00	104 ⁹⁵
CR-502 High stability oscillator crystal	95.95	
Suggest dealer installation of CR-502		
HM-77A TTP microphone	151.00	139 ⁹⁵
MB-62 Mounting bracket for main unit	25.95	
MB-63 Mounting bracket for control panel	18.95	
MB-65 Mounting base platform	35.95	
OPC-581 11.5' separation cable	60.95	
OPC-587 16' separation cable	79.95	
OPC-589 8-pin to jack adapter	35.95	
OPC-599 7+8-pin to 13-pin adapter	60.95	
SM-8 2-connector desk mic/up/down scan	200.00	169 ⁹⁵
SM-20 Deluxe desk microphone	259.00	219 ⁹⁵
SP-7 Small external speaker	94.95	
UT-86 Tone squelch; IC-706 Mk II only	69.95	
UT-102 Voice synthesizer	74.95	
UT-106 Plug-in DSP unit; IC-706 Mk II only	166.00	149 ⁹⁵

SHORTWAVE RECEIVERS

R-1* 1MHz-1.36GHz AM/FM handheld Rcvr Dm	\$650.00	489 ⁹⁵
R-1-15 1MHz-1.36GHz AM/FM hand/cell bkld Dmfv	500.00	369 ⁹⁵
HP-4 Lightweight headphones	29.95	
Note: R-1/R-1-15 use 'W'-series HT accessories		
R-10-05 .5M-1.36 AM/FM/SSB hand/cell bkld	641.00	499 ⁹⁵
\$100 instant coupon - R-10-05 blocked thru 6/30/98		
R-10-15* .5MHz-1.36GHz AM/FM/SSB Hh Rcvr	503.00	449 ⁹⁵
CP-12L Right angle cig cable w/filter	36.95	
CS-R10 DOS programming software; R-10	13.95	
OPC-474 Cloning cable (R-10 to R-10)	18.95	
CSW-R10 Windows prog soft/cable; R-10	50.95	
CT-17 CI-V level converter	169.00	139 ⁹⁵
HP-4 Lightweight headphones	29.95	
LC-140 Carrying case for R-10	38.95	
OPC-254L Right angle mini DC pwr cable	14.95	
SP-13 Earphone	4.95	
FL-32A 500 Hz CW filter; R-71A Δmwfv	126.00	99 ⁹⁵
FL-63A 250 Hz CW filter; R-71A Δmwfv	121.00	99 ⁹⁵
UI-8 FM unit; R-72A Δmw	119.00	69 ⁹⁵
R-100* 1MHz-1.856GHz AM/FM 12v Rcvr	1008.00	849 ⁹⁵
R-100-11 1MHz-1.856GHz am/fm 12v/cell bkld	1008.00	849 ⁹⁵
AH-7000 25-1000 MHz discone ant w/coax	206.00	179 ⁹⁵
CP-11 Cig cord w/noise filter	40.95	
HP-4 Lightweight headphones	29.95	
PCR-1000 5-1300 PC control Rcv/cell bkld	629.00	499 ⁹⁵
PerCon Spectrum FREE direct from Icom thru 6/30/98!		
UT-106 Plug-in DSP unit; PCR-1000	166.00	149 ⁹⁵
PCR-1000-03* 5-1300MHz PC controlled Rcv	629.00	569 ⁹⁵
PerCon Spectrum FREE direct from Icom thru 6/30/98!		
R-7000* 25 MHz-2 GHz scanning receiver Dm	1667.00	1299 ⁹⁵

ICOM - continued

AH-7000 25-1000 MHz discone ant w/coax	206.00	179 ⁹⁵
CK-70 (EX-299) 12v DC option	41.95	
MB-12 Mobile mount	59.95	
SP-3 External speaker	140.00	119 ⁹⁵
R-8500 .1MHz - 2GHz receiver/cell blocked	2588.00	1999 ⁹⁵
\$300 instant coupon - R-8500 blocked thru 6/30/98		
RS-R8500 software FREE with R-8500! Limited Time!		
R-8500-03* .1MHz - 2GHz receiver	2156.00	1869 ⁹⁵
RS-R8500 software FREE w/R-8500-03! Limited Time!		
AH-7000 25-1000 MHz discone ant w/coax	206.00	179 ⁹⁵
CR-293 High stability xtal unit	380.00	329 ⁹⁵
FL-52A 500 Hz CW filter	245.00	199 ⁹⁵
MB-12 Mobile mount	59.95	
RS-R8500 PC control soft w/RS-232 cable	52.95	
SP-7 Small external speaker	94.95	
SP-21 External speaker	138.00	119 ⁹⁵
TV-R7100 TV/FM adapter; R-8500/R-7100	426.00	369 ⁹⁵
UT-102 Voice synthesizer	74.95	
R-9000* .1-1999.8MHz Rcvr/spec scope	6579.00	5499 ⁹⁵
SP-20 Speaker w/audio filter	310.00	249 ⁹⁵
UT-36 Voice synthesizer	74.95	

*United States & state government agencies or a political subdivision thereof and communications utility companies and their legal agents **ONLY** may purchase unblocked models of R-1R-10/R-100/PCR-1000/R-7000/R-8500 and/or R-9000 for official government or communications utility company use only. Mail or FAX purchase order to AES. Exports: inquire.

2m TRANSCEIVERS

IC-2000H 50w 2m FM Xcvr/TTP mic	Δmwfv	\$310.00	259 ⁹⁵
\$35 instant coupon - IC-2000H until gone!			
OPC-347 23' DC power cable	46.95		
OPC-589 8-pin to jack adapter	35.95		
UT-85 Tone squelch unit	76.95		
UT-101 DTMF unit	28.95		
IC-2100H 55w 2m FM Xcvr/TTP mic	324.00	269 ⁹⁵	
BC-96 Microphone holder	43.95		
CP-13L Cig cable w/filter for BC-96	40.95		
OPC-288L DC power cable for BC-96	19.95		
CS-2100 Cloning software	13.95		
OPC-478 PC to radio cloning cable	45.95		
OPC-347 23' DC power cable	46.95		
OPC-440 Mic extension cable	85.95		
OPC-441 Speaker extension cable	33.95		
OPC-474 Radio to radio cloning cable	18.95		
OPC-589 8-pin to jack adapter	35.95		
OPC-647 8.2' mic extension cable	54.95		
EX-1513 Infrared sub receiver	28.95		
EX-1759 Infrared receiver	110.00	99 ⁹⁵	
HM-90A Wireless microphone	209.00	139 ⁹⁵	
HS-62 Flexible mobile mic	70.95		
MB-17A Quick release bracket	49.95		
IC-281H 50w 2m FM Xcvr/TTP/9600	Δwfv	513.00	299 ⁹⁵
MB-17A Quick release bracket	49.95		
OPC-347 23' DC power cable	46.95		
OPC-440 Mic extension cable	85.95		
OPC-589 8-pin to jack adapter	35.95		
UT-66 Voice synthesizer	83.95		
UT-85 Tone squelch unit	76.95		
UT-55 DTMF tone enc/dec; 2330A/2340	Δmf	69.95	59 ⁹⁵
UT-67 Tone squelch unit; IC-2330A	Δmwfv	124.00	59 ⁹⁵
IC-207H 45w 2m/35w 440 FM Xcvr/TTP mic	453.00	379 ⁹⁵	
BC-96 Microphone holder	43.95		
CP-13L Cig cable w/filter for BC-96	40.95		
OPC-288L DC power cable for BC-96	19.95		
CS-207 DOS prog software; IC-207H	13.95		
OPC-646 Cloning cable	89.95		
CSW-207 Win prog soft w/cable; IC-207H	50.95		
EX-1759 Infrared receiver	110.95	99 ⁹⁵	
HM-90A Wireless microphone	209.00	139 ⁹⁵	
HS-62 Flexible mobile mic	70.95		
MB-58 Remote controller bracket	39.95		
OPC-347 23' DC power cable	46.95		
OPC-440 Mic extension cable	85.95		
OPC-441 Speaker extension cable	33.95		

ICOM - continued

OPC-589 8-pin to jack adapter	35.95		
OPC-600 11.5' separation kit	45.95		
OPC-601 23' separation kit	60.95		
OPC-647 8.2' mic extension cable	54.95		
UT-89 Tone scan/decode unit; IC-2350H	110.00	99 ⁹⁵	
IC-2700H LTD 50w 2m/35w 440/HM90A	Δmwfv	860.00	499 ⁹⁵
BC-96 Microphone holder	43.95		
EX-1513 Infrared sub receiver	28.95		
MB-17A Quick release bracket	49.95		
MB-58 Remote controller bracket	39.95		
OPC-347 23' DC power cable	46.95		
OPC-439 23' separation kit	60.95		
OPC-440 Mic extension cable	85.95		
OPC-441 Speaker extension cable	33.95		
OPC-589 8-pin to jack adapter	35.95		
UT-66 Voice synthesizer	83.95		
UT-84 Tone squelch unit	110.00		
IC-2710H 50w 2m/35w 440 FM Xcvr/TTP	560.00	469 ⁹⁵	
BC-96 Microphone holder	43.95		
CP-13 Cig cable w/filter for BC-96	40.95		
OPC-288 DC power cable for BC-96	19.95		
CS-2710 DOS prog software; IC-2710H	13.95		
OPC-646 Cloning cable	89.95		
CSW-2710 Win prog soft w/cable; IC-2710H	50.95		
EX-1513 Infrared sub receiver	28.95		
EX-1759 Infrared receiver	110.00	99 ⁹⁵	
HM-90A Wireless microphone	209.00	139 ⁹⁵	
HS-62 Flexible mobile mic	70.95		
MB-58 Remote controller bracket	39.95		
MB-65 Mounting base platform	35.95		
OPC-347 23' DC power cable	46.95		
OPC-440 Mic extension cable	85.95		
OPC-441 Speaker extension cable	33.95		
OPC-589 8-pin to jack adapter	35.95		
OPC-600 11.5' separation kit	45.95		
OPC-601 23' separation kit	60.95		
OPC-647 8.2' mic extension cable	54.95		
UT-49 DTMF decoder unit	74.95		
UT-104 Tone squelch unit	39.95		
IC-821H 2m/430 SSB/FM sat Xcvr/9600/mic	1828.00	1499 ⁹⁵	
PS-85 Switching power supply	406.00	299 ⁹⁵	
AG-25 2m mast mounted GASFT preamp	220.00	189 ⁹⁵	
AG-35 430 MHz mast mounted preamp	228.00	199 ⁹⁵	
CR-293 High stability xtal unit	380.00	329 ⁹⁵	
FL-132 500 Hz main receiver CW filter	133.00	119 ⁹⁵	
FL-133 500 Hz sub band receiver CW filter	133.00	119 ⁹⁵	
HM-12 Scan hand microphone	74.95		
MB-5 Mobile mount	59.95		
SM-6 Desk microphone	128.00	119 ⁹⁵	
SP-3 External speaker	140.00	119 ⁹⁵	
SP-7 Small external speaker	94.95		
SP-20 Speaker w/audio filter	310.00	249 ⁹⁵	
SP-21 External speaker	138.00	119 ⁹⁵	
UT-36 Voice synthesizer; 820H	74.95		
UT-50 Tone decoder	74.95		
UT-84 Tone squelch unit; 821H	110.00	99 ⁹⁵	
UT-102 Voice synthesizer; 821H	74.95		
MB-50 Rem controller blk; Delta100H	Δmwfv	29.95	19 ⁹⁵
OPC-332 11.5' sep kit; Delta100H	Δmwfv	30.95	19 ⁹⁵
OPC-333 23' sep kit; Delta100H	Δmwfv	38.95	24 ⁹⁵
OPC-335 16.4' spkr cbl; Delta100H	Δmwfv	40.95	24 ⁹⁵
UT-75 DTMF decoder unit; Delta100H	Δmwfv	69.95	49 ⁹⁵
UT-76 Tone squelch unit; Delta100H	Δmwfv	165.00	99 ⁹⁵
AH-32 2m/440 dual band mob ant	Δmf	83.00	29 ⁹⁵
AHB-32 Tnk lip mt, coax; AH-32	Δf	76.00	14 ⁹⁵
Accessories for IC-2AT			
AD-12 Ext pwr adapter; 2/4GAT/32AT	Δmwfv	\$ 43.95	29 ⁹⁵
BA-10 Bottom slide cap	Δmwfv	14.95	9 ⁹⁵
BC-16U/BM112U Wall cgr; 5A/7/8 only	Δmwfv	32.95	29 ⁹⁵
BC-25U Extra wall cgr; BP-3 only	Δmwfv	35.95	29 ⁹⁵
BC-35 Drop-in rapid charger	Δmwfv	150.00	119 ⁹⁵
BP-2 425ma 7.2v long life battery	Δmwfv	85.95	59 ⁹⁵
BP-3 250ma 8.4v battery	Δmwfv	65.95	49 ⁹⁵
BP-4 Alkaline battery cases	Δmwfv	35.95	29 ⁹⁵

ICOM - continued

BP-5 425ma 10.8v high power battery	Δmwfv	109.00	79 ⁹⁵
BP-5A 425ma 10.8v direct charge batt	Δmwfv	109.00	79 ⁹⁵
BP-7 425ma 13.5v 5w battery	Δmwfv	121.00	99 ⁹⁵
BP-8 800ma 8.4v long life battery	Δmwfv	120.00	89 ⁹⁵
BP-70 270ma 13.2v batt; 2GAT/32AT	Δmwfv	113.00	79 ⁹⁵
CP-1 Cig cgr; BP-3/7/8/DC cord	Δmwfv	26.95	19 ⁹⁵
CP-10 Battery separation cable/clip	Δmwfv	51.00	14 ⁹⁵
CP-11 Cig cord w/noise filter	Δmwfv	40.95	29 ⁹⁵
DC-1 DC operation module	Δmwfv	40.95	29 ⁹⁵
FA-2 Extra 2m flexible antenna	Δmwfv	29.95	19 ⁹⁵
HH-SS Handheld shoulder strap	Δwfv	29.00	9 ⁹⁵
HM-9 Speaker/mic	Δmwfv	59.95	49 ⁹⁵
MB-16 Window/car door mount	Δmwfv	40.00	14 ⁹⁵
MB-16D Mobile mtg blk for HT	Δmw	40.00	14 ⁹⁵
MB-24 Window/car door mt; 2GAT	Δf	41.00	99 ⁹⁵
UT-40 Tone sq decoder; 2GAT/32AT	Δmwfv	83.95	49 ⁹⁵
Accessories for IC-21A			
AD-26 Batt pack adapt; rapid cgr	Δmwfv	\$ 18.00	6 ⁹⁵
BP-120 AA alkaline battery case	Δmwfv	35.95	24 ⁹⁵
HM-9L Speaker/mic	Δmwfv	59.00	24 ⁹⁵
LC-83 Vinyl case for BP-121	Δf	35.00	6 ⁹⁵
LC-85 Vinyl case for BP-123/124	Δf	35.00	6 ⁹⁵
IC-T2A 2m FM HT/8 AA nicads/cgr		194.00	169 ⁹⁵
AD-81 Adapter for BC-119-11		17.95	
BC-119-11 Desk charger (adapter required)		103.00	94 ⁹⁵
BP-194 AA alkaline battery case		18.95	
BP-195 9.6v 700ma nicad battery		42.95	
BP-196 9.6v 1050ma nicad battery		53.95	
CP-12L Rt angle cig charge cable w/filter		36.95	
CS-12 DOS prog software for IC-T2A		13.95	
OPC-474 Cloning cable (T2A to T2A)		18.95	
OPC-478 PC to radio cloning cbl; T2A		45.95	
CSW-HH Win prog soft w/cable; T2A		50.95	
HM-46 Slim-line speaker/mic		59.95	
HM-54 Hvy duty spkr/mic		83.95	
HM-75A Remote control microphone		96.95	
HS-51 Headset w/VOX		96.95	
LC-145 Carrying case for IC-T2A		38.95	
OPC-254L Right angle mini DC chg cable		14.95	
SP-13 Earphone		4.95	
AD-51 Batt pack adapter; W31A/Z1A	Δmwfv	14.95	9 ⁹⁵
LC-123 Vinyl case; Z1A; BP170/171/72	Δmwfv	38.95	19 ⁹⁵
LC-124 Vinyl case; IC-12A w/BP-173	Δfv	38.95	24 ⁹⁵
UT-93 Tone squelch; early IC-Z1A	Δwf	83.00	19 ⁹⁵
IC-T22A 2m FM HT/batt/cgr/TTP		283.00	239 ⁹⁵
IC-T7A/HP 4w 2m/440 FM HT/batt/cgr/TTP		330.00	279 ⁹⁵
IC-W32A 5w 2m/440 FM HT/batt/cgr/TTP/tone		365.00	309 ⁹⁵
AD-56 Batt pack adapter for rapid charger		18.95	
BC-119-11 Desk charger (adapter required)		103.00	94 ⁹⁵
BC-74/BC-110A Extra wall cgr; BP-111-114		40.95	
BP-170 Battery case		35.95	
BP-171 4.8v 700ma battery	Δmwfv	83.00	39 ⁹⁵
BP-172 4.8v 950ma battery		91.95	
BP-173 9.6v 600ma battery		150.00	139 ⁹⁵
BP-180 7.2v 600ma battery		83.95	
CP-12 Cig lighter cable w/filter		36.95	
CP-12L Right angle cig cable w/filter		36.95	
CS-T7 DOS prog software for IC-T7A		13.95	
CSW-32 DOS prog software for IC-W32A		13.95	
OPC-474 Cloning cbl (T7/32A to T7/32A)		18.95	
OPC-478 PC to radio cloning cbl; T7A/W32A		45.95	
CSW-HH Win prog soft w/cable; W32A/T7A		50.95	
FA-1443B Extra 2m/440 dual band flex ant		29.95	
HM-46 Slim-line speaker/mic		59.95	
HM-46L Slim-line spkr/mic, rt angle plug		59.95	
HM-54 Hvy duty spkr/mic		83.95	
HM-75A Remote control microphone		96.95	
HS-10 Boom mic/headset		69.95	
HS-10SA VOX unit		69.95	
HS-10SB PTT switchbox		69.95	
HS-85 Headset		105.00	94 ⁹⁵
LC-125 Vinyl case; T22A w/BP170/171/172		38.95	
LC-126 Vinyl case; T22A w/BP173		38.95	
LC-128 Vinyl case; IC-W32A		38.95	

PRICE LIST

ICOM - continued

LC-136 Vinyl case; T7A w/BP170/171/172	38.95	
LC-137 Vinyl case; T7A w/BP173/180	38.95	
MB-30 Mobile/wall bracket	41.95	
NCP-1 Nylon chest pack	44.95	39 ⁹⁵
OPC-254 Mini DC power cable	14.95	
OPC-254L Right angle mini DC pwr cable	14.95	
SP-13 Earphone	4.95	
UT-94 Tone squelch unit; T22A	55.95	
IC-T84/HP 5w 6m/2m/440 HT/BP200/cgr/TPP	419.00	349 ⁹⁵
AD-87 Batt pack adapter for rapid charger	8.95	
AD-88 PCB board; orig BC-119-11 w/IC-T8A	29.95	
BC-119-31 Desk charger (adapter required)	107.00	99 ⁹⁵
BP-197 3 AA battery case	24.95	
BP-198 4.8v 700ma NiMH battery	59.95	
BP-199 6v 700ma NiMH battery	70.95	
BP-200 9.6v 680ma NiMH battery	85.95	
CP-12L Right angle cig cable w/filter	36.95	
CS-T8K DOS prog software w/cable; IC-T8A	29.95	
OPC-478 Cloning cable (T8A to T8A)	18.95	
HM-46 Slim-line speaker/mic	59.95	
HM-54 Hvy duty spkr/mic	83.95	
HM-75A Remote control microphone	96.95	
HS-51 Headset w/VOX	96.95	
LC-147 Leather carrying case	24.95	
OPC-254L Right angle mini DC pwr cable	14.95	
SP-13 Earphone	4.95	
BP-130 Battery case; W21AT	35.95	29 ⁹⁵
BP-131 900ma 7.2v batt/mic; W21AT	133.00	69 ⁹⁵
BP-132 600ma 12v batt/mic; W21AT	150.00	79 ⁹⁵
HM-75 Spkr/mic w/rem cont; W21AT	96.95	59 ⁹⁵

Accessories for IC-2SAT/2SRA/24AT/W2A

AD-14 BC-74 charge adapter	43.95	29 ⁹⁵
AH-20 Replacement rcv ant; IC-2SRA	28.95	19 ⁹⁵
BA-12 Drop-in charger adapter	29.95	19 ⁹⁵
BC-72 Rapid desk charger	186.00	149 ⁹⁵
BC-74/BC-110A Wall cgr; BP-111-114	40.95	34 ⁹⁵
BP-82 7.2v 300ma battery	83.00	39 ⁹⁵
BP-83 7.2v 600ma battery	90.95	69 ⁹⁵
BP-84 7.2v 1000ma battery	120.00	89 ⁹⁵
BP-90 AA alkaline battery case	35.95	29 ⁹⁵
HM-65 Slim-line spkr/mic; W2A/2SRA	76.95	49 ⁹⁵
MB-22 Alligator belt/pocket clip	15.95	9 ⁹⁵
MB-25 Stainless wall storage unit	41.00	19 ⁹⁵
UT-51 Prog tone encoder unit	83.95	49 ⁹⁵

IC-2GKAT/HP 7w 2m HT/batt/cgr/TPP

AD-25 Battery charger adapter	63.95	
AD-28 Batt pack adapter for rapid charger	18.95	
BC-119-11 Desk charger (adapter required)	103.00	94 ⁹⁵
BC-77/BC-105A Extra wall charger	40.95	
BP-130A Battery case	35.00	19 ⁹⁵
BP-132A 600ma 12v battery/mic	150.00	89 ⁹⁵
BP-157A 900ma 7.2v battery	85.95	
BP-160 700ma 7.2v battery	66.00	29 ⁹⁵
BP-174 600ma 12v battery	98.95	
CP-13 Cig cable w/filter	40.95	
CP-13L Right angle cig cable w/filter	40.95	
HM-46 Slim-line speaker/mic	59.95	
HM-46L Slim-line spkr/mic, rt angle plug	59.95	
HM-54 Heavy duty spkr/mic	83.95	
HM-55A Speaker/mic w/TPP	159.00	79 ⁹⁵
HS-51 Headset w/VOX	96.95	
LC-116 Carrying case; BP-130A/157A/160	38.95	
LC-117 Carrying case for BP-132A	38.95	
MB-30 Mobile/wall bracket	41.95	
OPC-288 Mini DC power cable	19.95	
OPC-288L Right angle mini DC pwr cable	19.95	
SP-13 Earphone	4.95	
UT-49 DTMF decoder unit	74.95	
AD-22 External batt chg adapt; D1A	50.95	29 ⁹⁵
AD-27 Batt pack adapt; rapid cgr; D1A	14.95	12 ⁹⁵
BP-101 700ma 7.2v batt; Delta-1A	94.00	39 ⁹⁵
BP-102 1200ma 7.2v batt; Delta-1A	129.00	79 ⁹⁵
BP-103 600ma 12v battery; Delta-1A	151.00	99 ⁹⁵

ICOM - continued

LC-82 Vinyl case for BP-103; Delta-1A	35.95	19 ⁹⁵
UT-70 Tone encoder/decoder; D1A	200.00	99 ⁹⁵
AD-44 Batt adapt; rapid cgr; T21A	18.95	10 ⁹⁵
BP-153 600ma 12v battery; IC-T21A	150.00	99 ⁹⁵
BP-159 Battery case; IC-T21A	35.95	29 ⁹⁵
LC-109 Vinyl case; BP151/159; T21A	38.95	24 ⁹⁵
LC-110 Vinyl case; BP-153; IC-T21A	38.95	14 ⁹⁵
LC-111 Vinyl case; BP-152; IC-T21A	38.95	24 ⁹⁵
RP-1520 25w 2m FM repeater...special order	3025.00	2499 ⁹⁵
Repeaters require service dept. set-up; \$72 minimum		
430/440 MHz & 1.2 GHz EQUIPMENT		
IC-481H 35w 440 FM/TPP/9600 baud	\$579.00	269 ⁹⁵
IC-46XAT 440 FM HT/batt/cgr/TPP	355.00	259 ⁹⁵
IC-T41A 440 FM HT/batt/cgr/TPP	360.00	239 ⁹⁵
IC-T42A 440 FM HT/batt/cgr/TPP	306.00	229 ⁹⁵
RP-4020/50w 50w 440 repeater special order	3200.00	20649 ⁹⁵
Repeaters require service dept. set-up; \$72 minimum		
MB-21 Bracket; IC-901 controller unit	26.00	6 ⁹⁵
RP-1220 1.2 GHz FM repeater...special order	3450.00	2849 ⁹⁵
RP-1220 requires ICOM service dept. set-up; \$72 minimum		
AG-1200 1.2 GHz mast mt preamp	189.00	169 ⁹⁵
ACCESSORIES		
CT-16 Satellite interface unit	\$160.00	144 ⁹⁵
CT-17 CI-V level converter	169.00	139 ⁹⁵
HM-12 Scan hand microphone	74.95	
HM-14 Scan/TPP microphone	113.00	99 ⁹⁵
HM-56A Autodial TTP mic	173.00	149 ⁹⁵
MB-23 Side mount carrying handle	15.95	
OPC-118 Adapter; AT-500; 725/735/765/781	25.95	
OPC-137 24-pin adaptor cable; all base	25.95	
PS-85 Power supply	406.00	299 ⁹⁵
SM-6 Electret desk microphone	128.00	119 ⁹⁵
SM-8 2-connector desk mic w/up/down scan	200.00	169 ⁹⁵
SM-20 Deluxe desk microphone	259.00	219 ⁹⁵
SP-3 External speaker	140.00	119 ⁹⁵
SP-5 Mobile speaker	54.95	
SP-7 Small external speaker	94.95	
SP-10 Slim-line external speaker	69.95	
SP-12 Slim-line speaker w/visor clip	44.95	
SP-20 Speaker w/audio filter	310.00	249 ⁹⁵
UT-34 Tone squelch unit	94.95	69 ⁹⁵

INTERFLEX (INT)

dspGOLD Software for AEA DSP-2232	\$129.95	
KaGOLD DualPort Software for KPC/KAM	79.95	
KaGOLD DualPort w/Pactor Soft; KPC/KAM	99.95	
PKGOLD w/Pactor Software for PK-232MBX	99.95	
PKGOLD/900 Software for PK-900	129.95	

International Ant (IAC)

160m double Bazooka 248' antenna	\$195.95	
80m double Bazooka 121' antenna	135.95	
40m double Bazooka 64' antenna	115.95	

JPS (JPS)

ANC-4 Antenna noise canceller	\$195.00	189 ⁹⁵
NF-60 Auto DSP audio spectral notch filt	160.00	119 ⁹⁵
NIR-10 Dlx noise/notch DSP bandpass filt	299.95	199 ⁹⁵
NIR-12 Dual DSP noise reduction/filter unit	375.00	349 ⁹⁵
Power Pack 115vac/12vdc adapter	16.95	
SRK-12 Software development kit; NIR-12	35.95	
NRF-7 Noise reducer and filter unit	219.95	169 ⁹⁵
Power Pack 115vac/12vdc adapter	16.95	

JSC (JSC)

ROTOR CABLE

JRR-520 5-wire; AR-40	Δmw, per ft.	14 ⁹⁵
JRR-520	Δmw, 100 ft. Roll	12 ⁹⁵
JRR-520	Δmw, 500 ft. Roll	44 ⁹⁵
JRR-520	Δmw, 1000 ft. Roll	79 ⁹⁵

K-COM (KCO)

RF-1 Modular telephone 3-30 MHz RFI filter	\$16.95	
RF-1/Low Modular phone 5-3 MHz RFI filter	16.95	

K-COM - continued

RF-1/2-line 2-line modular 3-30 MHz RFI filter	22.95	
RF-1/coiled Coiled cord modular 3-30MHz filter	22.95	
RF-2 Hard-wired telephone 3-30 MHz RFI filter	10.95	
KLM (KLM)		
ANTENNAS		
160V 160, 80 or 40m vertical, 24' high	* \$300.00	259 ⁹⁵
80M-1 80m rotatable dipole, 90' long	*T 980.00	849 ⁹⁵
80M-2 80m rotatable dipole w/relays	*T 1387.00	1199 ⁹⁵
80M-2 80m 2 el beam, 36' boom, 4 db	*T 3251.00	2799 ⁹⁵
80M-2R 80m 2 el beam w/relays	*T 4154.00	3579 ⁹⁵
80M-3 80m 3 el beam, 60' boom, 7 db	*T 5416.00	4669 ⁹⁵
80M-3R 80m 3 el beam w/relays	*T 7043.00	6069 ⁹⁵
SSV-80 40-15 80/40/15m vert, 65' high	*T 966.00	839 ⁹⁵
6-12-8LPA 6-12 MHz 8el LP, 36' boom	*T 2465.00	2129 ⁹⁵
Heavy duty boom only for 6-12-8LPA		
6-12-8LPA w/Heavy duty boom	*T 2865.00	2469 ⁹⁵
6-30-15LPA 6-30 MHz 15el LP, 46' boom	*T 4078.00	3519 ⁹⁵
7.2/10-30-LPA 7.10-30MHz 8 el, 42' bm	*T 1459.00	1259 ⁹⁵
Heavy duty boom only for 7.2/10-30-LPA		
7.2/10-30-LPA w/heavy duty boom	*T 1921.00	1659 ⁹⁵
40M-1B 40m rotatable dipole, 46.5' bm	* 261.00	229 ⁹⁵
40M-2B 40m 2 el beam, 16' boom, 4.9 db	* 638.00	549 ⁹⁵
40M-3B 40m 3 el beam, 32' boom, 6.5 db	* 911.00	789 ⁹⁵
Heavy duty boom only for 40M-3B		
40M-3B w/heavy duty boom	*T 1214.00	1049 ⁹⁵
40M-4B 40m 4 el beam, 42' boom, 7.2 db	* 1213.00	1049 ⁹⁵
Heavy duty boom only for 40M-4B		
40M-4B w/heavy duty boom	*T 1716.00	1479 ⁹⁵
40-10V 40/20/15/10m 26.5' vertical	*Tm 373.00	259 ⁹⁵
10-30-7LPA 10-30MHz 7el LP, 30' bm, 7db	*T 1043.00	899 ⁹⁵
Heavy duty boom only for 10-30-7LPA		
10-30-7LPA w/heavy duty boom	*T 1577.00	1359 ⁹⁵
SK-8 Conv kit for 10-30 log w/o 40m dipole	* 333.00	289 ⁹⁵
SK-8/40M Conv kit for 10-30 log w/40m dipole	* 502.00	439 ⁹⁵
KT-31 20-15-10m 24.5' rotatable dipole	* 317.00	289 ⁹⁵
KT-34A 20-15-10m, 4 el, 16' boom, 7 db	* 624.00	539 ⁹⁵
KT-34 Upgrade kit - KT-34A to XA		
KT-34XA 20-15-10m, 6 el, 32' boom, 9 db	* 858.00	739 ⁹⁵
Heavy duty boom only for KT-34XA		
KT-34XA w/heavy duty boom	*T 1206.00	1039 ⁹⁵
30M-2 30m 2 el beam	* 520.00	449 ⁹⁵
30M-3 30m 3 el beam	* 754.00	649 ⁹⁵
20M-4 20m 4 el beam, 21' boom, 7.7 db	* 541.00	469 ⁹⁵
20M-5 20m 5 el beam, 42' boom, 9.7 db	* 837.00	729 ⁹⁵
Heavy duty boom only for 20M-5		
20M-5 w/heavy duty boom	*T 1248.00	1079 ⁹⁵
20M-6 20m 6 el beam, 57' boom, 11 db	*T 1206.00	1039 ⁹⁵
Heavy duty boom only for 20M-6		
20M-6 w/heavy duty boom	*T 1750.00	1499 ⁹⁵
20-30-6LPA 20-30MHz, 6el LP, 19'bm, 7db	* 391.00	349 ⁹⁵
17M-3 17m 3el beam, 16.75' bm, 6.5db	*T 443.00	389 ⁹⁵
15M-4 15m 4 el beam, 14' boom, 7.7db	* 287.00	249 ⁹⁵
15M-6 15m 6 el beam, 36' boom, 10.5db	*T 679.00	589 ⁹⁵
Heavy duty boom only for 15M-6		
15M-6 w/heavy duty boom	*T 989.00	859 ⁹⁵
15M-6LD As 15M-6, but light duty	* 527.00	459 ⁹⁵
12-17-30D WARC tri-band dipole	* 317.00	279 ⁹⁵
12-17-30V WARC tri-band vertical	* 166.00	149 ⁹⁵
10M-4 10m 4 el beam, 10' bm, 7.7 db	* 263.00	239 ⁹⁵
10M-6 10m 6 el beam, 27.5' boom, 11 db	* 415.00	369 ⁹⁵
JV-10 10m 26' vertical antenna	* 122.00	109 ⁹⁵

Note: All KLM antennas supplied with a KLM balun/matching system, which is included in the price.

6M-5 6m 5 el beam, 11.75' boom, 9.7 db	261.00	229 ⁹⁵
6M-7LB 6m 7el, 25.75' bm, 11.5db	* 381.00	349 ⁹⁵
6M-7LD 6m 7 el beam, 20' bm, 10.5 db	* 298.00	269 ⁹⁵
6M-10 6m 10 el beam, 34' boom, 11.7 db	*T 542.00	469 ⁹⁵
6M-14 6m 14 el beam, 61' boom, 14 db	*T 754.00	649 ⁹⁵
JV-6 6m 15' vertical antenna, 3 db	* 129.00	119 ⁹⁵
2M-4X 2m 4 el rear mt beam, 4.2' bm, 8.5db	81.00	74 ⁹⁵
2M-7X 2m 7 el beam, 8.75' boom, 10.3 db	91.00	84 ⁹⁵
2M-10X 2m 10 el beam, 15' boom, 12.5 db	104.00	94 ⁹⁵

KLM - continued

2M-11X 2m 11 el beam, 15.33' bm, 12.5 db	108.00	99 ⁹⁵
2M-12X 2m 12 el beam, 21' beam, 13.4 db	116.00	106 ⁹⁵
2M-13BLA 2m 13 el beam, 21.5' bm, 13.3db	125.00	114 ⁹⁵
2M-14C 2m circ 14 el beam, 12.9'bm, 11db/CS3	211.00	179 ⁹⁵
2M-14CM 2m circ 14 el beam, no switcher ..	169.00	139 ⁹⁵
2M-15X 2m 15 el beam, 28' boom, 14.8 db ..	215.00	189 ⁹⁵
2M-16LBX 2m 16 el beam, 28' boom, 14.5db	244.00	199 ⁹⁵
2M-20LBX 2m 20 el beam, 38.5' boom	316.00	269 ⁹⁵
2M-22C 2m circ 22el beam, 19'bm, 13db/CS3	265.00	229 ⁹⁵
2M-22CM 2m circ 22 el beam, no switcher ..	237.00	199 ⁹⁵
JV-2 2m 5' vertical antenna, 3 db	131.00	59 ⁹⁵
JV-2X 2m 11' vertical antenna, 5 db	181.00	89 ⁹⁵
JV-22X 220 7' el beam, 4.75' bm, 8.8 db	98.00	89 ⁹⁵
220-14X 220 14 el beam, 14.5' bm, 13.5db ..	142.00	119 ⁹⁵
220-22LBX 220 22el beam, 29.75'bm, 15.6db	178.00	154 ⁹⁵
JV-220X 220 7' vertical ant, 5 db	168.00	39 ⁹⁵
432-20LBX 432 20 el, 12.33'bm, 15.3db	189.00	109 ⁹⁵
432-30LBX 432 30 el beam, 22'bm, 17.3db ..	222.00	194 ⁹⁵
435-18C 432 cir 18el, 7'bm, 12db/CS2	267.00	239 ⁹⁵
435-18CM 432 circ 18 el beam, no switcher ..	186.00	169 ⁹⁵
435-40CX 432 circ 40el beam, 15'bm, 15.2db/CS2	309.00	269 ⁹⁵
435-40CM 432 circ 40 el beam, no switcher ..	221.00	199 ⁹⁵
440-6X 440 6 el beam, 2.33' boom, 8.9 db ..	65.00	59 ⁹⁵
440-10X 440 10 el beam, 5.33' bm, 11.2 db ..	82.00	74 ⁹⁵
440-16X 440 16 el beam, 10.33'bm, 14.2db ..	142.00	124 ⁹⁵
1.2-15LBX 1.2 GHz 15 el beam	127.00	114 ⁹⁵
1.2-24LBX 1.2 GHz 24 el beam	155.00	139 ⁹⁵
1.2-44LBX 1.2GHz 44el beam, 12'bm, 18.2db	200.00	179 ⁹⁵
CS-2 432 antenna circularity switch	85.00	79 ⁹⁵
CS-3 2m antenna circularity switch	55.95	
LO-With Large set: 2M22C/43540CX/7 1/2' mast	585.00	499 ⁹⁵
LO-Without Large set: 2M22CM/43540CMX mast	462.00	399 ⁹⁵
SO-With Small set: 2M14C/43518C/5' mast ..	462.00	399 ⁹⁵
SO-Without Small set: 2M14CM/43518CM/mast	364.00	319 ⁹⁵

FIBERGLASS MASTS

5' 1 1/2" OD fiberglass mast	\$ 40.00	34 ⁹⁵
7-1/2" 1 1/2" OD fiberglass mast	50.00	44 ⁹⁵

COUPLERS/POWER DIVIDERS

440-2N 432 MHz - for 2 ants, w/type N	\$ 81.95	
440-4N 432 MHz - for 4 ants, w/type N	91.95	

FERRITE BALUN

50-150-1:1 50-150MHz 500w PEP 1:1 bin Dmw	56.00	14 ⁹⁵
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*These antennas are drop-shipped (shipped direct to you from the KLM factory). On these factory drop-shipsments we prefer payment in full with order, however, we will accept your credit card with the understanding that we will process the charge when we order the merchandise from the factory. This means that you may be billed before you receive your drop-shipped merchandise. Shipment is FOB Monroe, Washington via truck, COD for freight charges only. Freight charges will be collected upon delivery by the carrier. Please allow sufficient time for delivery on these special order antennas.

KACHINA (KAC)

505-DSP/505DSP2 PC control HF Xcvr/hand mic	1995.95	
505-AT Internal automatic antenna tuner ..	239.95	
505-DSP/505-AT PC HF Xcvr/ant tuner installed	2234.95	
505-ECH External cover for control head ..	25.95	
505-MB Mobile mount bracket	40.95	
505-SM Rubber shock mounts; 505-MB ..	19.95	
970055 25' control head cable	57.95	
970056 75' control head cable	115.95	
970057 25' RS-232 cable	16.95	
970058 75' RS-232 cable	37.95	

KC Tracker (See L.L. GRACE)

KANTRONICS (KAN)

Data Engine TNC w/no modems	\$319.95	249 ⁹⁵
Data Engine w/DE-1200 modem	389.95	299 ⁹⁵
DE-1200 1200 baud modem	89.95	49 ⁹⁵
DE-19K2/9K6 19.2/9600 baud modem	109.95	99 ⁹⁵
KPC-3 Plus/128K Small packet TNC/128K RAM	149.95	
KPC-3 Plus User's Guide (comes w/KPC3+)	19.95	
KPC-9612 Plus/128K 9600 controller/128K ..	289.95	
128K 128K memory upgrade; KPC-3/9612 ..	24.95	

KANTRONICS - continued

KAM Plus All Mode Communicator	349.95	319 ⁹⁵
KAM 98 Single port multi-mode dig controller	449.95	399 ⁹⁵
12VDC Adaptor 300ma adapt; KAM Plus/KPC3	9.95	
Host Master II+ IBM software	89.95	
Package 1 Enhancement board; KAM	119.95	
Package 2 Upgrade; KAM enhance board	39.95	
Package 3 Upgrade; KAM Plus	39.95	
Pactern II 98 Software for Kantronics TNCs	69.95	
Superfax II WX FAX program for IBM	49.95	
APRS adapter cable; GPS to Kantronics TNC ..	29.95	
G-TOR Book	14.95	
Pager Handbook for the Radio Amateur	14.95	

KENWOOD (KEN)

TS-950SDX Dlx Xcvr w/keyer/DSP/filters	5299.95	3999 ⁹⁵
DRU-2 Digital recording unit	149.95	139 ⁹⁵
IF-232C Level translator	129.95	119 ⁹⁵
MC-43S Extra 8-pin hand mic w/up-down ..	59.95	
MC-60A 8-pin amp desk mic w/up-down ..	159.95	149 ⁹⁵
MC-80 8-pin electret desk mic w/up-down ..	119.95	109 ⁹⁵
MC-90 2-head DSP desk microphone	269.95	239 ⁹⁵
PS-950 External spkr w/audio filters	159.95	149 ⁹⁵
VS-2 Voice synthesizer	69.95	
YG-455CN-1 250 Hz CW filter (2nd IF)	179.95	164 ⁹⁵
YK-88CN-1 270 Hz CW filter (1st IF)	139.95	129 ⁹⁵
YK-88SN-1 1.8 KHz SSB filter (1st IF)	139.95	129 ⁹⁵
TS-870S 9-band Xcvr/SW Rcvr/AFDSP/tuner ..	3199.95	2299 ⁹⁵
PS-40 Switching power supply	229.95	199 ⁹⁵
PS-52 Heavy duty power supply	309.95	269 ⁹⁵
DRU-3 Dig recording unit; TS-870 only	139.95	119 ⁹⁵
DRU-3A Dig recording unit; TS-870/570	139.95	129 ⁹⁵
MC-43S Extra 8-pin hand mic w/up-down ..	59.95	
MC-60A 8-pin amp desk mic w/up-down ..	159.95	149 ⁹⁵
MC-80 8-pin electret desk mic w/up-down ..	119.95	109 ⁹⁵
MC-90 2-head DSP desk microphone	269.95	239 ⁹⁵
SO-2 TCXO unit	189.95	179 ⁹⁵
SP-31 External speaker	99.95	
VS-2 Voice synthesizer	69.95	
TS-570D HF Xcvr/Rcvr/AFDSP/tune/mic	1749.95	1399 ⁹⁵

\$200 instant coupon - TS-570D thru 5/31/98

TS-570D(G) 9-band Xcvr/SW Rcvr/AFDSP/tune/mic	1749.95	1499 ⁹⁵
TS-570S HF Xcvr/6m/Rcvr/AFDSP/tune/mic Dmwfv	2069.95	1749 ⁹⁵

\$200 instant coupon - TS-570S thru 5/31/98

TS-570S(G) 9-band Xcvr/6m/Rcvr/AFDSP/tune/mic	2069.95	1779 ⁹⁵
PS-40 Switching power supply	229.95	199 ⁹⁵
PS-53 Heavy duty 22.5A power supply	289.95	249 ⁹⁵
DRU-3A Dig recording unit; TS-570/870	139.95	129 ⁹⁵
KSS Sky command system; 570/870 .special order	1177.85	899 ⁹⁵
MB-430 Mobile mounting bracket	49.95	
MC-43S 8-pin hand mic w/up-down	59.95	
MC-60A 8-pin amp desk mic w/up-down ..	159.95	149 ⁹⁵
MC-80 8-pin electret desk mic w/up-down ..	119.95	109 ⁹⁵
MC-90 2-head DSP desk microphone	269.95	239 ⁹⁵
PG-22 Heavy duty DC cable	37.95	
SO-2 TCXO unit	189.95	179 ⁹⁵
SP-23 External speaker	89.95	
VS-3 Voice synthesizer	39.95	
YK-88C-1 500 Hz CW filter	139.95	129 ⁹⁵
YK-88CN-1 270 Hz CW filter	139.95	129 ⁹⁵
YK-88SN-1 1.8 KHz SSB filter	139.95	129 ⁹⁵
TS-50S Compact HF Xcvr/SW Rcvr/mic/mt	1169.95	849 ⁹⁵
TS-60S Compact 6m Xcvr/mic/mt	1199.95	999 ⁹⁵

\$100 instant coupon - TS-60S thru 5/31/98

PS-40 Switching power supply	229.95	199 ⁹⁵
PS-53 Heavy duty 22.5A power supply	289.95	249 ⁹⁵
AT-50 External HF auto tuner	379.95	329 ⁹⁵
PG-4M 18' extension cable for AT-50	29.95	
IF-100 Computer interface	89.95	
IF-232C Level translator	129.95	119 ⁹⁵
MB-13 Deluxe quick release mtg bracket ..	55.95	
MC-47 Extra multi-func 8-pin hand mic ..	59.95	
MC-60A 8-pin amp desk mic w/up-down ..	159.95	149 ⁹⁵
MC-80 8-pin electret desk mic w/up-down ..	119.95	109 ⁹⁵
PG-2Y DC cable	39.95	

KENWOOD - continued

SO-2 TCXO unit	189.95	179 ⁹⁵
SP-23 External speaker	89.95	
TC-50/50Case Travel case for TS-50S/60S ..	89.95	
YK-107C 500 Hz CW filter	139.95	129 ⁹⁵
AT-450 80-10m int auto tuner; 450/690	279.95	229 ⁹⁵
AT-850 80-10m int auto tuner; TS-850S	279.95	229 ⁹⁵
YK-88C 500 Hz CW filter; R-5000	139.95	129 ⁹⁵
YK-88CN 270 Hz CW filter; R-5000	104.95	99 ⁹⁵
YK-88SN 1.8 KHz SSB filter; R-5000	139.95	119 ⁹⁵
HS-5 Deluxe headphones	79.95	
HS-6 Lightweight headphones	59.95	
LF-30A 1kw PEP low pass filter	64.95	
MA-5 5-band 200w PEP HF mob ant	189.95	139 ⁹⁵
VP-1 Hvy duty chrome spg, bpr mt	64.95	29 ⁹⁵
MC-43S 8-pin hand mic w/up-down switch ..	59.95	
MC-60A 8-pin amp desk mic w/up-down ..	159.95	149 ⁹⁵
MC-80 8-pin electret desk mic w/up-down ..	119.95	109 ⁹⁵
E30-1765-08 Adapt cord; MC-85 - 8-pin Xcvr	21.95	
PC-1A 8-pin phone patch	139.95	129 ⁹⁵
PG-3B 15A DC line noise filter	29.95	
PG-3G 25A DC line noise filter	51.95	
SP-41 Compact external speaker	49.95	
SP-50B High quality external mobile speaker	55.95	
TU-7 Prog encoder; TR-751A	54.95	
TU-8 CTCSS tone unit; TS-450S/690S Dmwfv	54.95	49 ⁹⁵
YG-455C-1 500 Hz CW filter; 450/690	169.95	149 ⁹⁵
YK-88S-1 2.4 KHz SSB filter; 450/690	139.95	119 ⁹⁵
TM-255A 40w 2m SSB/FM/9600 baud	1109.95	849 ⁹⁵
DFK-3 9' separate display cable kit	26.95	
DFK-4 13' remote cable kit	59.95	
DFK-7A Deluxe 22' rem cable kit	99.95	74 ⁹⁵
TSU-8 CTCSS decoder	59.95	
TS-790A 45w 2m/40w 440 SB/FM/mic Dmwfv	2199.95	1599 ⁹⁵

\$200 instant coupon - TS-790A until gone!

MFJ 916 duplexer FREE with TS-790A until gone!

IF-232C Level translator	129.95	119 ⁹⁵
MC-43S Extra 8-pin hand mic w/up-down ..	59.95	
MC-60A 8-pin amp desk mic w/up-down ..	159.95	149 ⁹⁵
MC-80 8-pin electret desk mic w/up-down ..	119.95	109 ⁹⁵
PG-22 Heavy duty DC cable	37.95	
SP-31 External speaker	99.95	
TSU-5 Programmable CTCSS decoder	64.95	
UT-10W 10w 1.2 GHz module	629.95	549 ⁹⁵
VS-2 Voice synthesizer	69.95	
TM-642AD 2m/220 FM Xcvr/backlit TT mic ..	989.95	739 ⁹⁵
TM-742AD 50/35w 2m/440 FM/backlit TT mic ..	959.95	699 ⁹⁵

MFJ 916 duplexer FREE with TM-742AD! Limited Time!

DFK-3 9' separate display cable kit	26.95	
DFK-4 13' remote cable kit	59.95	
DFK-7 Deluxe 22' remote cable kit	89.95	
MJ-88 Modular to 8-pin mic adapter	30.95	
MJ-89 Modular mic switch	69.95	
TSU-7 CTCSS decoder unit	59.95	
UT-50S 50w 6m unit	379.95	329 ⁹⁵
UT-220S 25w 220 MHz unit	379.95	329 ⁹⁵
UT-440S 35w 440 MHz unit	339.95	299 ⁹⁵
UT-1200 10w 1.2 GHz unit	459.95	399 ⁹⁵
DFK-3B 9' sep disp cable kit; TM-733A	39.95	
DFK-4B 13' rem cable kit; TM-733A	60.95	
DFK-7B Dlx 22' rem cbl kit; TM-733A	99.95	
TM-6707A 50w 2m/35w 440 FM Xcvr/TPP mic	519.95	449 ⁹⁵
TM-V7A 50w 2m/35w 440 FM Xcvr/TPP mic ..	719.95	499 ⁹⁵

\$30 instant coupon - TM-V7A thru 5/31/98

DFK-3C 9' separate display cable kit	44.95	
DFK-4C 13' remote cable kit	64.95	
DFK-7C Deluxe 23' remote cable kit	99.95	
MJ-88 Modular to 8-pin mic adapter	30.95	
MJ-89 Modular mic switch	69.95	
PG-5A Packet data cable	15.95	
VS-3 Voice synthesizer	39.95	
MA-700 3db 2m/5.5db 440 ant w/duplexer ..	109.95	99 ⁹⁵
Larsen PO-K Roof mt, coax; MA-700	25.95	
Larsen PO-MM Magnet mt, coax; MA-700 ..	31.95	

PRICE LIST

KENWOOD - continued

Larsen PO-TLM Trunk lip mt, coax; MA-700	27.95
TM-331A 25w 220 FM Xcvt w/TTP mic	579.95 499 ⁹⁵
DTU-2 Digital paging unit	32.95
KQT-8/TSU-6 Prog CTCSS decoder	49.95
MC-44DM Extra multi-function TTP mic	79.95
TM-561A 10w 1.2 GHz FM Xcvt/TTP/encoder	579.95 499 ⁹⁵
TM-261A 50w 2m FM Xcvt w/TTP mic	379.95 269 ⁹⁵

\$30 instant coupon - TM-261A thru 5/31/98

TM-461A 35w 440 FM Xcvt w/TTP mic	509.95 439 ⁹⁵
TSU-8 CTCSS decoder	59.95
MC-45DM Extra multi-function TTP mic	79.95 39 ⁹⁵
MC-52DM Back-lit TTP mic; 241/331/441/541	79.95
MC-53DM Back-lit TTP mic; 251/733/42/255/7A	79.95

Accessories for TH-75A/77A/25AT/26AT

BT-6 6-AA battery case	29.95 19 ⁹⁵
KNB-5A 800ma 7.2v battery	63.95 49 ⁹⁵
KNB-7A 800ma 12v (5w) battery	87.95
KQT-8/TSU-6 CTCSS encoder/decoder	49.95
PG-3E Cig cord w/filter for DC-1	35.95 29 ⁹⁵

Accessory for TH-72A/47A

TH-48A 2w 440 FM HT/batt/cgr/TTP	469.95 229 ⁹⁵
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Accessories for TH-28A/48A/78A

BC-15A Rapid cgr; PB-13/14/17/18	119.95 29 ⁹⁵
ME-1 Memory expansion	39.95 29 ⁹⁵
PB-17 700ma 12v (5w) battery	99.95
PB-18 1100ma 7.2v battery	89.95
SC-33 Small soft case; 28A/48A	24.95 19 ⁹⁵
SC-34 Large soft case; 28A/48A	24.95
SC-35 Regular soft case; 78A	24.95 99 ⁹⁵
SC-36 Large soft case; 78A	24.95 99 ⁹⁵

TH-22AT 5w 2m FM HT/batt/KSC-8A/TTP

TH-22AT 5w 2m FM HT/batt/KSC-8A/TTP	324.95 279 ⁹⁵
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\$30 instant coupon - TH-22AT thru 5/31/98

TH-42AT 2.5w 440 HT/batt/cgr/TTP	399.95 299 ⁹⁵
TH-79A(D) 2.7w 2m/440HT/batt/cgr/TT	549.95 309 ⁹⁵

\$20 instant coupon - TH-79A(D) thru 5/31/98

TH-79A(D)H 5w 2m/440 HT/batt/cgr/TTP	579.95 379 ⁹⁵
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\$20 instant coupon - TH-79A(D)H thru 5/31/98

BH-6 Swivel mount	39.95
BT-9 4-AA battery holder	29.95
EMC-1 Lapel clip mic/ear piece	43.95 24 ⁹⁵
EMC-3 Lapel clip mic/ear piece	29.95
HMC-3 VOX/boom mic headset	59.95
KSC-8A Drop-in cgr; 25/26/75/77/22/79	26.95
KSC-14 2-pack rapid charger	87.95
PB-32 600ma 6v battery	66.95
PB-33 1200ma 6v battery	89.95
PB-34 600ma 9.6v (5w) battery	89.95
PG-2W DC cable w/fuse	17.95
PG-31 Cig lighter cord w/filter	36.95
SC-37 Soft case; 22/42AT/PB-30/32	24.95
SC-41 Soft case; TH-79A(D) w/PB-32	24.95
SC-43 Soft case; TH-79A(D) w/PB-33/34	24.95
SMC-32 Mini water resist rt angle spkr/mic	52.95
SMC-33 Speaker/mic w/remote control	65.95
SMC-34 Spkr/mic w/vol cont/function keys	39.95
TSU-8 CTCSS decoder; TH-22/42AT	59.95
WR-2 Water resistant bag; TH-22/42AT	29.95
TH-671A 5w 2m/440 FM HT/batt/cgr/TTP	429.95 349 ⁹⁵

\$40 instant coupon - TH-671A thru 5/31/98

BC-19 Rapid charger	64.95
BT-11 4-AA battery holder	17.95
EMC-3 Lapel clip mic/ear piece	29.95
HMC-3 VOX/boom mic headset	59.95
PB-38 650ma 6v battery	44.95
PB-39 600ma 9.6v (5w) battery	57.95
PG-2W DC cable w/fuse	17.95
PG-4P Computer control cable	32.95
PG-31 Cig lighter cord w/filter	36.95
SC-45 Soft case for PB-38/39	15.95
SMC-32 Mini water resist rt angle spkr/mic	52.95
SMC-33 Speaker/mic w/remote control	65.95
SMC-34 Spkr/mic w/vol cont/function keys	39.95
TH-235A 1.5w 2m HT/batt/cgr/TTP	229.95 139 ⁹⁵

KENWOOD - continued

TH-235AH 5w 2m FM HT/batt/desk cgr/TTP	249.95 199 ⁹⁵
BT-10 6 AA alkaline battery case	13.95
EMC-3 Lapel clip mic/ear piece	29.95
HMC-3 VOX/boom mic headset	59.95
KSC-8A Drop-in cgr; 25/26/75/77/22/79	26.95
KSC-14 2-pack rapid charger	87.95
PB-36 7.2v 950ma nicad battery	42.95
PB-37 12v 950ma (5w) nicad battery	57.95
PG-2W DC cable w/fuse	17.95
PG-31 Cig lighter cord w/filter	36.95
SMC-32 Mini water resist rt angle spkr/mic	52.95
SMC-33 Speaker/mic w/remote control	65.95
SMC-34 Spkr/mic w/vol cont/function keys	39.95
TSU-8 CTCSS decoder	59.95
WR-2 Water resistant bag	29.95
EZ-PASS WIN 95 No-code tech study package	34.95
Primer Welcome to Amateur Radio primer	2.00 50 ⁹⁵
VC-H1 Visual Communicator SSTV unit	584.95 499 ⁹⁵

LARSEN (LAR)

27-31 MHz ANTENNA	
NMO-27C 10m ant only (no mount)	\$ 33.95

47-54 MHz ANTENNA	
NMO-50C 6m ant only (no mount)	\$ 33.95

144-174 MHz ANTENNAS	
NMO-150B 2m black ant only (no mt), 3 db	\$ 33.95
NMO-150C 2m ant only (no mount), 3 db	30.95

220-265 MHz ANTENNAS	
NMO-220B 220 black ant only (no mt), 3 db	\$ 35.95
NMO-220C 220 ant only (no mount), 3 db	30.95

440-460 MHz ANTENNAS	
NMO-440B 440 black ant only (no mt), 5 db	\$ 35.95
NMO-440C 440 ant only (no mount), 5 db	29.95

MM-2/70 2m/440 ¼ wave/2db mag mt ant	42.95
NMO-2/70B 2m/440 blk ant only (no mt), 2/4db	54.95 39 ⁹⁵
NMO-2/70C 2m/440 ant (no mount), 2/4db	50.95 39 ⁹⁵
NMO-2/70-SH 2m/440 ant (no mt), ¼ ww/2db	33.95

NMO-012 135-160/148-173 2.5db (no mt)	50.95 29 ⁹⁵
NMO-Spec 136-512 MHz ¼ wave ant (no mt)	9.95

NMOQ-Spec-B 136-512 black ¼ ww ant (no mt)	13.95
NMOQ-Spec-K 136-512MHz ¼ ww ¾ hole ant	23.95
NMOQ-2/70-B 2m/440 ¼ ww cell look ant (no mt)	31.95
NMO-1290B 1.2 GHz black ant only (no mt)	32.95

FB1-136 Base station 136-230 MHz ant	137.80 129 ⁹⁵
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ON GLASS ANTENNAS	
KG-144-UD-PL 2m 3 db on glass antenna	\$ 70.95
KG-220-UD-PL 220 3 db on glass antenna	70.95
KG-440-UD-PL 440 2.4 db on glass antenna	58.95
KG-2/70-CX-PL 2m/440 2.5/4.5db on glass	95.95
KG-Reinstall Reinstall kit for KG-ants	5.95

KULDUCKIES - For Hand-helds	
KD4-146 2m BNC Kulduckie	\$ 17.95
KD4-270 2m/440 BNC Kulduckie	28.95
KD4-222 220 BNC Kulduckie	17.95
KD4-445 440 ¼ wave BNC Kulduckie	17.95

KD4-146-HQ 2m part helical, part ¼ wave BNC	22.95
KD4-220-HW 2m ¼ wave BNC antenna	34.95
KD4-440-HW 440 ¼ wave BNC antenna	34.95

ACCESSORIES & REPLACEMENT PARTS	
A-7 Adapter for NMO antenna on NLA mount	\$ 8.95
AD-2/70 100w 2m/440 duplexer	75.95
BSA-K Base mounting kit for mobile ant	46.95
NMO-CAP-B Black rain cap for NMO mount	3.95
NMO-K ¾ hole mt w/coax for NMO ant	13.95
NMO-MM Magnet mt, coax for NMO ant	29.95
NMO-TLP Low profile tnk lid mt, coax; NMO ant	26.95
PO-K Roof mt, coax for SO-239 ant	25.95
PO-MM Magnet mt, coax for SO-239 ant	31.95
PO-TLM Trunk lip mt, coax for SO-239 ant	27.95
RG-SS Extra super seal NMO gaskets (3)	3.95
SPRING Shock spring	8.95

LARSEN - continued

TMB-34 Trunk mtg bkt for NMO antenna	4.95
TMB-34B Black trunk mtg bkt for NMO ant	6.95
W-154 Extra closed coil whip; 440 ant	17.80 4 ⁹⁵
W-490 49" whip	9.95
W-490B Black 49" whip	12.95

LOGSAT (LOG)

Logsat Professional Satellite tracking CDROM	\$ 69.95
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MFJ ANTENNA TUNERS (MFJ) Last Minute Price

989C Dlx 3kw PEP w/roller inductor	\$359.95 319 ⁹⁵
986 3kw PEP w/roller inductor	329.95 299 ⁹⁵
962D 1.5kw PEP/meter/switch/balun/roller ind	269.95 249 ⁹⁵
969 HF & 6m 300w roller inductor tuner	189.95 179 ⁹⁵
949E 300w/meter/dummy/sw/balun	149.95 139 ⁹⁵
1312C 12vdc 300ma ps 2.5mm coaxial; 949E	12.95
948 300w/meter/switch/balun	129.95 119 ⁹⁵
941E 300w tuner w/meter, switch, balun	119.95 109 ⁹⁵
945E 300w tuner w/meter plus 6m	109.95 99 ⁹⁵
20 Mobile bracket for 945D	4.95
901B Versa Tuner 200w ant tuner	79.95
910 80-10m mobile antenna matcher	19.95
16010 200w random wire tuner	49.95
903 6m antenna tuner	49.95
906 6m antenna tuner w/wattmeter	79.95
914 Auto tuner extender	59.95
921 2m/220 300w PEP tuner/SWR/wattmeter	69.95
924 440 MHz 300w PEP tuner/SWR/wattmeter	69.95
934 300w tuner w/artificial ground	169.95 159 ⁹⁵

MEMORY KEYS

451 Dedicated CW keyboard w/memory	\$ 99.95 89 ⁹⁵
451X Morse keyboard interface only	79.95
452 CW keyboard/keyer w/disp/keyboard	129.95 119 ⁹⁵
452X CW keyboard/keyer w/disp, no keyboard	99.95 89 ⁹⁵
498 Dlx CW keyboard/keyer w/disp/keyboard	179.95 169 ⁹⁵
498X Dlx CW keyboard w/disp, no keyboard	159.95 149 ⁹⁵
490 492 keyer/Benchner paddle combination	174.95 164 ⁹⁵
490X 492 keyer for w/Benchner or 564	109.95 99 ⁹⁵
564 Deluxe iambic paddle for 490X	49.95
492 192 char menu driven memory keyer	99.95 89 ⁹⁵
80 8000 char memory expansion for 492	14.95
492X Memory keyer w/8000 char expansion	114.95 104 ⁹⁵
78 Remote control for 492/492X	19.95
493 32k char menu driven mem keyer	139.95 129 ⁹⁵
79 Remote control for 493	19.95
551 IBM AT-101 keyboard for 493	39.95
5409 493 9-pin serial port 6' cable	12.95
5425 493 25-pin serial port 6' cable	12.95

ELECTRONIC KEYS

407C Deluxe electronic keyer	\$ 69.95
401C Econo keyer	49.95

KEYER/PADDLES

422D Keyer/Benchner paddle combination	\$144.95 134 ⁹⁵
422CX Keyer only	79.95
422DX Keyer only	79.95
441 SlimLine econo keyer	59.95
442 SlimLine keyer/Benchner paddle combo	154.95 144 ⁹⁵
442X SlimLine keyer only	89.95
447 SlimLine deluxe keyer	79.95
564 Deluxe iambic chrome paddle	49.95
564B Deluxe iambic black paddle	49.95

COMPUTER INTERFACES

1224 Interface	\$109.95 99 ⁹⁵
1265 Disk software for VIC/C64; 1224	19.95
1285 Software for IBM; 1224	19.95
1225 Receive only interface	69.95 49 ⁹⁵
1264B Tape software; VIC/C64; 1225	19.95 99 ⁹⁵
1265B Disk software; VIC/C64; 1225	19.95 99 ⁹⁵
1285B Software for IBM; 1225	19.95 14 ⁹⁵
1270C Packet radio TNC2	119.95 109 ⁹⁵
47A Mailbox 32K mem; 1270/1274	49.95 29 ⁹⁵
47B Mailbox 128K mem; 1270/1274	69.95 39 ⁹⁵
47C Mailbox 512K mem; 1270/1274	149.95 89 ⁹⁵
2400 2400 baud modem	29.95

MFJ - continued

	Last Minute Prices	Reg Sale
9600B 9600 baud modem	109.95	99 ⁹⁵
1270CT Turbo packet w/2400 baud	149.95	139 ⁹⁵
1270CQ Packet w/9600 baud modem	239.95	219 ⁹⁵
1276 Packet/Pactor controller	149.95	139 ⁹⁵
1276T Packet/Pactor Turbo controller	179.95	169 ⁹⁵
1278B Multi-mode controller w/Pactor	299.95	269 ⁹⁵
1278B/DSP Controller w/Pactor & DSP	379.95	349 ⁹⁵
45A 32K RAM IC only	14.95	8 ⁹⁵
45C 512K RAM IC only	99.95	49 ⁹⁵
48 1278 upgrade	24.95	
48B 1278B upgrade	24.95	
48E 1278 packet encryption EPROM	29.95	19 ⁹⁵
52 TNC2 deviation meter board	29.95	
56A Pactor/mailbox 32K board for 1278B	69.95	
56B Pactor/mailbox 128K board for 1278B	89.95	
56C Pactor/mailbox 512K board; 1278B	149.95	139 ⁹⁵
780 DSP data filter for 1278B	99.95	89 ⁹⁵
2400 2400 baud modem	29.95	
9600B 9600 baud modem	109.95	99 ⁹⁵
1278BT Turbo controller/2400/Pactor	329.95	299 ⁹⁵
1282 C64 starter pack	24.95	
1282B Multicom package; C64/128	39.95	
1282BD Multicom 64 disk only	29.95	14 ⁹⁵
1284 5 1/4" IBM starter pack	24.95	
1284D 1284 disk only	14.95	
1284M 3 1/2" IBM starter pack	24.95	
1284MD 1284M disk only	14.95	
1284W MFJCOM for Windows	29.95	
1287 Macintosh starter pack	24.95	
1287B Mac multicom starter pack	49.95	
1287D 1287 disk only	14.95	8 ⁹⁵
1287BD 1287B disk only	39.95	22 ⁹⁵
1288 Packet terminal program	9.95	
1289 5 1/4" multicom software for IBM Dmwf	59.95	44 ⁹⁵
1289D 1289 disks only	49.95	34 ⁹⁵
1289M 3 1/2" multicom software for IBM	59.95	
1289MD 1289M disks only	49.95	
1289W Multicom for Windows with cable ..	59.95	
1289WD Multicom for Windows, less cable ..	49.95	
1293 JVFax/HamCom soft/FJ-1213 ....Dmfv	9.95	7 ⁹⁵
1214PC Multimode interface for IBM	149.95	139 ⁹⁵
59M 1214 3 1/2" software upgrade	29.95	
40B TNC2 upgrade 32K/RAM	29.95	16 ⁹⁵
40C TNC2 upgrade 32K	19.95	
40E TNC2 packet encryption EPROM	29.95	14 ⁹⁵
43 Real time clock for TNC	19.95	
44 Plug-in scope tuning adapter	19.95	9 ⁹⁵
52B FM deviation/temp/volt meter for TNC ..	39.95	
1271 Packet card for C64/128	49.95	
1272B TNC to microphone interface	39.95	
1272BX TNC/mic switch; PK-232	39.95	
1272BYH TNC/mic switch; KAM HF	39.95	
1272BYV TNC/mic switch; KAM VHF	39.95	
1272BZ TNC/mic switch; PK-88	39.95	
1272M TNC/mic RJ-45 switch; MFJ/PK-900 ..	39.95	
1272MX TNC/mic RJ-45 switch; PK-232	39.95	
1272MYH TNC/mic RJ-45 switch; KAM HF	39.95	
1272MYV TNC/mic RJ-45 sw; KAM VHF; KPC3 ..	39.95	
1272MZ TNC/mic RJ45 switch; PK88	39.95	19 ⁹⁵
1273 Packet tuning indicator	49.95	9 ⁹⁵

SSB/CW FILTERS

722 SSB/CW notch filter	\$ 79.95
752C Dual tunable SSB/CW filter	99.95 89 ⁹⁵
781 DSP filter for any TNC or controller	129.95 119 ⁹⁵
784B Deluxe tuneable DSP filter	249.95 229 ⁹⁵
5184 Cable patch for 784B	7.95

PHONE PATCH

624D Phone patch w/audio VU meter	\$129.95 119 ⁹⁵
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DUMMY LOADS

250 2kw PEP dummy load w/oil	\$ 49.95
250X 2kw PEP dummy load, less oil	29.95
260C 300w 0-650 MHz dry dummy load	29.95
260CN 300w 0-650 MHz type N dry dummy ..	34.95

MFJ - continued

	Last Minute Prices	Reg Sale
264 1.5kw 0-650 MHz dry dummy load	59.95	
264N 1.5kw 0-650 MHz type N dry dummy ...	69.95	

SWR/WATTMETERS

812B 144-220 MHz SWR/FS/wattmeter	\$ 34.95
815B 160-6m cross-needle SWR/wattmeter ..	69.95
816 1.8-30 MHz toroidal SWR/wattmeter	34.95
817 2m/440 cross needle meter	79.95
840 2m 5w wattmeter/dummy load for HT ..	19.95
841 2m 5w in-line HT wattmeter/SWR	39.95
860 1.8-60 MHz cross-needle meter	44.95
862 2m/220/440 cross-needle meter	54.95
864 1.8-60MHz/2m/440 cross needle meter ..	84.95

SHORTWAVE ACCESSORIES

306 Car radio SWL converter	\$ 79.95
956 LW/MW/SW preselector/tuner	39.95
959B Receiver ant tuner w/preamp	99.95
1020B .3-30 MHz indoor active rcv ant	69.95
1022 300KHz-200MHz active rcv antenna	39.95
1024 .05-30 MHz outdoor active rcv ant	129.95 119 ⁹⁵
1040B Deluxe receiver preselector	99.95
1045C Receiver preselector	69.95 49 ⁹⁵

BOOKS

30 Golden Classics book	\$ 9.95
31 Oscar book	7.95
32 Packet Made Easy book	12.95
33 Mobile Handbook book	12.95
35 World of Ham Radio book	7.95
36 Shortwave Listeners Guide; Apts/Condos ..	9.95
37 Ham Communications Circuit Files book ..	9.95
38 Easy-up Antennas book	16.95
3036 The Packet Radio Operators book	12.95
3101 Fox Hunt Adventure book	7.95
3210 Novice license guide	7.95
3211 Tech Plus license guide	7.95
3212 No code tech license guide	14.95
3213 General license guide	7.95
3214 Advanced license guide	7.95
3215 Extra license guide	7.95
3301 Troubleshooting Antenna & Feedlines book	12.95
3302 73 Dipole and Long-Wire Antennas	12.95
3303 73 Vertical, Beam, and Triangle Ants ...	12.95
3304 Technician Antenna Handbook	9.95 4 ⁹⁵
3305 Antennas & Transmission Lines book ...	19.95
3400 Morse Code: Breaking the Barrier	14.95
3502 Solid State QRP Projects	12.95
3504 FET Principles, Experiments & Projects ..	16.95
3506 Ferromagnetic-Core Design book	19.95
3507 Practical RF Design Manual	19.95
3508 Radio Components Handbook	39.95

ACCESSORIES

1305 5vdc 300ma adapter	\$ 12.95
1312 12vdc 300ma adapter, 2.5mm plug	12.95
1312B 12vdc 300ma adapter, 2.1mm plug ..	12.95
1312C 12vdc 300ma adapter, 2.5mm coaxial ..	12.95
1315 12vdc 500ma adapter	14.95
9-102 MFJ 25th anniversary coffee mug	3.95
105C 24-hour quartz wall clock	19.95
107B 24-hour digital clock	9.95
108B 24/12-hour dual disp digital clock	19.95
112 Deluxe world map clock	24.95
114 Large LED 24-hour clock	39.95
116 24/12-hour LED clock/10 minute timer ..	14.95
118 Giant 24/12 hour LCD clock	24.95
119 Giant 24/12 hour LCD/in temp clock	49.95
152 Thermo clock; in/out temp/24-hr clock ..	24.95
201 1.5-250 MHz dip meter	119.95 109 ⁹⁵
202B RF noise bridge	59.95
203 160-10m bandswitched dip meter	99.95 89 ⁹⁵
204B Antenna bridge	79.95
205 160-10m ant resistance meter	89.95 69 ⁹⁵
206 Antenna current probe	79.95 39 ⁹⁵
207 160-10m SWR analyzer	79.95
208 2m SWR analyzer	79.95

MFJ - continued

	Last Minute Prices	Reg Sale
209 1.8-170 MHz SWR analyzer	129.95	119 ⁹⁵
212 MatchMaker tune up device	79.95	
214 Amplifier Saver	49.95	
216 Deluxe Amplifier Saver	59.95	
217 SWR analyzer, 30-50 MHz	79.95	29 ⁹⁵
218 SWR analyzer, 150-170 MHz	79.95	39 ⁹⁵
219B SWR analyzer, 440 MHz/VSO-239 adapt ..	99.95	89 ⁹⁵
219N SWR analyzer, 440 MHz w/type N	99.95	79 ⁹⁵
224 2m FM signal analyzer	159.95	149 ⁹⁵
249 1.8-170 MHz SWR analyzer/LCD counter ..	219.95	199 ⁹⁵
68 249 to 259 upgrade kit	29.95	
259 1.8-170 MHz SWR analyzer/RF res meter ..	239.95	219 ⁹⁵
29 Padded carrying pouch; 209/249/259 ..	19.95	
29B Pouch with window; 209/249/259	24.95	
66 1.8-30/30-170 MHz dip coils; 249/259 ..	19.95	
270 Guardian Angel 400w PEP lightning protect	29.95	
97 Gas tube plug for 270	9.95	
281 ClearTone communications speaker	9.95	
283 Speaker/mic, split jack; Alinco	15.95	
284 Speaker/mic; Icom/Yaesu/Alinco	15.95	
285 Mini spkr/mic; Icom/Yaesu/Alinco	15.95	
285M Mini spkr/mic L; Icom/Yaesu/Alinco	15.95	
285W Mini spkr/mic for Icom W2A	15.95	
286 Speaker mic; Kenwood	15.95	
287 Mini spkr/mic; Kenwood	15.95	
287L Mini spkr/mic L for Kenwood	15.95	
288 Headset/mic; Icom/ADI/Star/RS/older Yae ..	24.95	
288K Headset/mic for Kenwood	24.95	
288Y Headset/mic; Yae FT-10/50/VX-1R	24.95	
291 Earphone for Icom spkr/mic	4.95	
291K Earphone for Kenwood spkr/mic	4.95	
292 Earphone/mic for Kenwood HT	17.95	
292Y Earphone/mic; Yae FT-10/40/50/VX-1R ..	17.95	
295Y Spkr/mic; Yaesu FT-10/40/50/VX-1R	15.95	
310 BNC HT antenna window mount clip	14.95	
315 Universal Grigmatic HT mount holder	14.95	
323 Keep-it-up battery maintainer	59.95	24 ⁹⁵
333BM 3.5" HiFlux NMO magnet mt	14.95	
333BS 3.5" HiFlux SO-239 magnet mt	14.95	
335BM 5" HiFlux NMO magnet mt	19.95	
335BS 5" HiFlux SO-239 magnet mt	19.95	
346 600 MHz LCD frequency counter	189.95	119 ⁹⁵
382 Deluxe amplified communications spkr ..	39.95	
411 Personal Morse Code Tutor	69.95	49 ⁹⁵
413 Basic Code Tutor	39.95	
414 Professional Morse Tutor w/LCD	199.95	189 ⁹⁵
417 Code Tutor with QSO	59.95	
418 Code Tutor with LCD display	79.95	
462B Voice Memory Keyer	119.95	109 ⁹⁵
462B RTTY/ASCII/CW/AMTOR Rcvr multi-reader	179.95	169 ⁹⁵
5162 Receiver cable for 462B	4.95	
550 Hand key	7.95	
552 CW interface for 2m HT	59.95	
554 Deluxe CW practice oscillator	79.95	
554X Dlx oscillator w/281 spkr/550 key	99.95	
557 Code oscillator w/key	24.95	
641-I2 Battery charger; Icom BP-131/132	49.95	
641-I3 Battery charger; Icom BP-173/180	49.95	
641-K Battery charger for Kenwood	49.95	
641-Y2 Batt cgr; Yaesu FNB-10/11/12/17/27 ..	49.95	
641-Y3 Battery charger; Yaesu FNB-31/33	49.95	
641-Y4 Batt cgr; Yaesu FNB-40/41/V47/49	49.95	
10-BCI-2 Charger cup; Icom BP-131/132	12.95	
10-BCI-3 Charger cup; Icom BP-173/180	12.95	
10-BCY-2 Cgr cup; Yae FNB-10/11/12/17/27 ..	12.95	
10-BCY-3 Charger cup; Yaesu FNB-31/33	12.95	
10-BCY-4 Cgr cup; Yae FNB-40/41/V47/49	12.95	
701 Toroid RF filters	14.95	
702 200w low-pass filter	24.95	
704 1kw low-pass filter	39.95	
711 High pass filter	19.95	
713 2m HT intermod filter	59.95	
714 2m mobile intermod filter	59.95	

PRICE LIST

MFJ - continued Last Minute Prices Reg Sale

762	81db 170MHz BNC attenuator	69.95	
850	AC line voltage monitor	19.95	
912	W91N remote balun	49.95	
916	2m/440 duplexer	29.95	
931	Artificial ground unit	79.95	
1025	Noise canceling antenna	149.95	139 ⁹⁵
1026	Deluxe noise canceling unit w/antenna	169.95	159 ⁹⁵
1046	1.6-33MHz receiver passive preselector	99.95	89 ⁹⁵
1048	1.6-33MHz Xcvr passive preselector	119.95	109 ⁹⁵
1112	Multiple DC outlet	29.95	
1116	Dlx multiple DC outlet	44.95	
1118	High current multiple DC outlet	69.95	
1213	Interface for JVFA/hamComm	39.95	
1266	C64 disk code tutor program	99.95	9 ⁹⁵
176	1266/67 interface brd; key/keyboard	19.95	1 ⁹⁵
1268	IBM PC memory keyer	49.95	24 ⁹⁵
1269	IBM code tutor	19.95	
1281	IBM Easy-DX logging program	39.95	14 ⁹⁵
1286	Gray Line DX Advantage prog; IBM	29.95	
1292	Video digitizer for IBM	199.95	119 ⁹⁵
1610	Novice theory tutor soft; IBM	29.95	19 ⁹⁵
1611	Tech theory tutor soft; IBM	29.95	19 ⁹⁵
1612	General theory tutor soft; IBM	29.95	19 ⁹⁵
1613	Advanced theory tutor soft; IBM	29.95	19 ⁹⁵
1614	Extra theory tutor soft; IBM	29.95	24 ⁹⁵
1621	40-10m 54" portable ant w/tuner	79.95	
1633	Advanced theory tutor soft; Mac	29.95	14 ⁹⁵
1634	Extra theory tutor soft; Mac	29.95	14 ⁹⁵
1635	No-code theory tutor software; Mac	49.95	39 ⁹⁵
1680K	Windows soft package; Ken	109.95	69 ⁹⁵
1680Y	Windows soft package; Yaesu	109.95	59 ⁹⁵
1681	Log Windows software	69.95	49 ⁹⁵
1682	Packet Windows software	29.95	19 ⁹⁵
16831	Rig Windows software for Icom	29.95	
1683K	Rig Windows software for Kenwood	29.95	
1683Y	Rig Windows software for Yaesu	29.95	
53831	Icom Xcvr interface cable	49.95	
5383K	Kenwood Xcvr interface cable	49.95	
5383Y	Yaesu interface cable, std 6-pin DIN	49.95	
5383YB	Yaesu interface cable, mini 6-pin DIN	49.95	
1700B	Combination ant/xmtr switch	79.95	
1701	6-position coax switch	49.95	
1702B	2-position coax switch	21.95	
1702B	2-pos 1.1 GHz type N switch	31.95	
1702C	2-position coax switch	21.95	
1702CN	2-pos 1.1 GHz type N switch	31.95	
1704	4-pos 500 MHz switch/lightning protect	59.95	
1704N	4-position type N switch	69.95	
1710	2m 1/2 wave telescopic antenna	9.95	
1712	2m/440 telescopic antenna	14.95	
1713	2m/440 SuperFlex Thin Duk HT ant	19.95	
1714	2m 1/2 wave telescopic antenna	16.95	
1715	2m half wave telescopic whip	16.95	
1716	2m/440 duck for HT	16.95	
1717	Gain 2m/440 duck for HT	19.95	
1718	2m shorty duck for HT	12.95	
1721	2m HT UltraLite mag mt antenna	14.95	
1722	2m/440 HT UltraLite mag mt antenna	18.95	
1724B	2m/440 magnet mt antenna	14.95	
1728B	2m 440 wave mag mt ant/PL259/BNC	24.95	
1729	2m/440 magnet mt antenna	29.95	
1730	2m pocket roll up vertical ant	14.95	
1734	2m/440 2.6/6.3db glass mt antenna	39.95	
1736	6m J-Pole travel antenna	24.95	
1738	2m 2.6db glass mt antenna	29.95	
94	Remount kit for 1734/1738	4.95	
1740	2m 1/2 wave ground plane ant	14.95	
1750	2m 1/2 wave ground plane ant	19.95	
1752	220 1/2 wave ground plane ant	19.95	
1754	2m/440 ground plane antenna	24.95	
1756	6m DX vertical antenna	69.95	
1762	6m beam antenna	69.95	
1763	2m 3el portable beam	39.95	
1764	2 & 6m dual 1/2 super gain base ant	44.95	

MFJ - continued Last Minute Prices Reg Sale

1766	Stacked 2m dual 1/2 base ant	109.95	69 ⁹⁵
1768	2m/440 beam antenna	69.95	
1778	G5RV 160-10m 102' ant (needs tuner)	34.95	
1782	Super Hi-Q 10-30 loop/basic control	269.95	169 ⁹⁵
1786	Super Hi-Q 10-30MHz loop/dlx control	319.95	289 ⁹⁵
1312B	12vdc 300ma adapter; 1782/1786	12.95	
1788	40m Super Hi-Q loop antenna	379.95	349 ⁹⁵
1793	80/40/20m vertical antenna	179.95	129 ⁹⁵
1796	40/20/15/10/6/2m 10' vertical ant	199.95	179 ⁹⁵
1798	Super Hi-Q 10-30MHz loop/dlx control	269.95	249 ⁹⁵
1824BB	Cell look alike BNC scanner ant	19.95	
1828B	Magnet mt BNC scanner antenna	29.95	
1828M	Mag mt Motorola plug scan ant	29.95	19 ⁹⁵
4025MV	Dlx 30A adjustable ps, 35A surge	149.95	139 ⁹⁵
4235MV	MightyLite 22A switching ps, 25A surge	149.95	139 ⁹⁵
4245MV	MightyLite 40A switching ps, 45A surge	199.95	189 ⁹⁵
5020R	MFJ TNC - Yaesu FT50R & compatibles	14.95	
5020RYV	KAM VHF/KPC3 - Yae FT50R/comp	14.95	
5022	MFJ TNC - Alinco/Standard HT cable	14.95	
5022X	PK-232 - Alinco/Sta HT cable	14.95	9 ⁹⁵
5022YV	KAM VHF/KPC3 - Ali/Sta HT cable	14.95	
5024	MFJ TNC - Ico/Yae/Al/RS HT cable	14.95	
5024B	PK/PacComm/compatible - Icom/Yaesu	14.95	
5024X	PK-232 - Ico/Yae/Al/RS HT cbl	14.95	
5024YV	KAM VHF/KPC3 - Ico/Yae/Al/RS HT cbl	14.95	
5024Z	PK-88 - Ico/Yae/Al/RS HT cbl	14.95	
5026	MFJ TNC - Kenwood HT cable	14.95	
5026X	PK-232 - Kenwood HT cable	14.95	9 ⁹⁵
5026YV	KAM VHF/KPC3 - Kenwood HT cable	14.95	
5026Z	PK-88 - Kenwood HT cable	14.95	
5060	MFJ TNC - Yaesu acc 6-pin mini DIN	14.95	4 ⁹⁵
5060YH	KAM HF - Yaesu acc 6-pin mini DIN	14.95	
5064	MFJ TNC - Icom acc 5-pin DIN	14.95	
5064YH	KAM HF - Icom acc 5-pin DIN	14.95	
5066	MFJ TNC - Kenwood acc 13-pin DIN	14.95	
5066YH	KAM HF - Kenwood acc 13-pin DIN	14.95	
5080	MFJ TNC - Yaesu 8-pin cable	14.95	
5080M	MFJ TNC - Yaesu FT-2500M/7400H	14.95	
5080MX	PK-232 - Yae 2500M/7400H	14.95	9 ⁹⁵
5080MYV	KAM VHF/KPC3 - Yae 2500M/7400H	14.95	
5080MZ	PK-88 - Yae 2500M/7400H	14.95	4 ⁹⁵
5080X	PK-232 - Yae 8-pin cable	14.95	
5080YH	KAM HF port - Yaesu 8-pin cable	14.95	
5080YV	KAM VHF/KPC3 - Yaesu 8-pin cable	14.95	
5080Z	PK-88 - Yaesu 8-pin cable	14.95	4 ⁹⁵
5082	Open end - 8-pin mic cable	9.95	
5084	MFJ TNC - Icom 8-pin cable	14.95	
5084M	MFJ TNC - Icom 8-pin modular	14.95	
5084MX	PK-232 - Ico 8-pin modular	14.95	
5084MYV	KAM VHF/KPC3 - Icom 8-pin mod	14.95	
5084MZ	PK-88 - Ico 8-pin modular	14.95	
5084X	PK-232 - Icom 8-pin cable	14.95	16 ⁹⁵
5084YH	KAM HF port - Icom 8-pin cable	14.95	
5084YV	KAM VHF/KPC3 - Icom 8-pin cable	14.95	
5084Z	PK-88 - Icom 8-pin cable	14.95	
5086	MFJ TNC - Kenwood/Alinco 8-pin cable	14.95	
5086M	MFJ TNC - Kenwood 8-pin modular	14.95	
5086MX	PK-232 - Ken 8-pin modular	14.95	9 ⁹⁵
5086MYV	KAM VHF/KPC3 - Ken 8-pin mod	14.95	
5086MZ	PK-88 - Ken 8-pin modular	14.95	
5086X	PK-232 - Ken/Al/ 8-pin cable	14.95	
5086YH	KAM HF port - Ken/Al/ 8-pin cable	14.95	
5086YV	KAM VHF/KPC3 - Ken/Al/ 8-pin cable	14.95	
5086Z	PK-88 - Ken/Al/ 8-pin cable	14.95	
5088M	MFJ TNC - Radio Shack 8-pin modular	14.95	
5088MX	PK-232 - RS 8-pin modular	14.95	
5088MYV	KAM VHF - RS 8-pin modular	14.95	
5088MZ	PK-88 - RS 8-pin modular	14.95	
5205	5-pin DIN open end cable	4.95	
5213	Open end - Kenwood acc 13-pin DIN	9.95	
5220R	Open end - Yaesu FT50R/compatibles	9.95	
5222	Open end - Ali split HT cable	9.95	
5224	Open end - Ico/Yae/Al/RS HT cable	9.95	2 ⁹⁵
5226	Open end - Kenwood HT cable	9.95	

MFJ - continued Last Minute Prices Reg Sale

5268	Open end - modular phone plug cable	9.95	
5412	IBM printer cable	9.95	
5413	RS-232 6' cable DB-25M-25F	9.95	
5414	RS-232 6' cable DB-25M-9F	9.95	
5803/10	3' coax jumper cable	4.95	
8100K	Shortwave regenerative Rcvr kit	59.95	
8100W	Shortwave regenerative Rcvr wired	79.95	
8400K	2m receiver kit	79.95	54 ⁹⁵
8400W	2m receiver wired	99.95	89 ⁹⁵
9606X	6m FM/data Xcvr w/mic	169.95	159 ⁹⁵
8621	VHF data radio w/145.01 MHz	119.95	109 ⁹⁵
8621X1	APRS ready VHF data radio/145.79MHz	139.95	129 ⁹⁵
8631	220 MHz data radio w/223.70 MHz	149.95	139 ⁹⁵
4110	Portable AC power supply	49.95	
5100	Data radio cable - MFJ/TAPR	14.95	
5100X	Data radio cable - PK-232	14.95	9 ⁹⁵
5100YH	Data radio cable - KPC-9612	14.95	
5100YV	Data radio cable - KAM/KPC-3	14.95	
5100Z	Data radio cable - PK-88	14.95	4 ⁹⁵
9015	5w 15m CW Xcvr	189.95	169 ⁹⁵
9017	5w 17m CW Xcvr	189.95	129 ⁹⁵
9020	5w 20m CW Xcvr	189.95	169 ⁹⁵
9030	5w 30m CW Xcvr	189.95	169 ⁹⁵
9040	5w 40m CW Xcvr	189.95	169 ⁹⁵
27	Handle for CW station	4.95	
412	Plug-in Curtis keyer	39.95	
726	Plug-in audio filter	29.95	
971	200w portable ant tuner w/meter	99.95	
1770	Portable 15m dipole	34.95	
1771	Portable 17m dipole	34.95	
1772	Portable 20m dipole	34.95	
1773	Portable 30m dipole	34.95	
1774	Portable 40m dipole	34.95	
4112	Portable power pack	49.95	34 ⁹⁵
4114	Rechargeable power pack	69.95	
9115B	9015 Xcvr/tuner/ps/ant	364.80	279 ⁹⁵
9117B	9017 Xcvr/tuner/ps/ant	364.80	219 ⁹⁵
9120B	9020 Xcvr/971 tuner/4114 ps/1772 ant	364.80	329 ⁹⁵
9130B	9030 Xcvr/tuner/ps/ant	364.80	279 ⁹⁵
9140B	9040 Xcvr/971 tuner/4114 ps/1774 ant	364.80	329 ⁹⁵
9406X	6m SSB Xcvr w/mic	269.95	249 ⁹⁵
9420X	12w 20m SSB Xcvr w/mic	249.95	229 ⁹⁵
9440X	12w 40m SSB Xcvr w/mic	249.95	229 ⁹⁵
9475X	12w 75m SSB Xcvr w/mic	249.95	229 ⁹⁵
62	Headphone kit	4.95	
415	SSB Xcvr CW adapter for 9420X	39.95	
415B	SSB Xcvr CW adapter for 9440X	49.95	
971	200w HF portable ant tuner w/meter	99.95	
4110	Portable AC power supply	49.95	
4114	Rechargeable power pack	69.95	
416	CW adapter for 9406X	39.95	
1776	6m dipole for 9406X	34.95	

MG Electronics (MGE)

HFS-1 10w mobile speaker, 3.5mm plug \$ 19.95

MAGELLAN (MAG)

GPS-2000XL	12 ch GPS receiver	\$209.99	149 ⁹⁵
GPS-4000XL/12	12ch GPS/carry case	349.99	249 ⁹⁵
00-09018-000	PC ext power cig cable	14.99	
00-69007-000	External power/data module	49.99	
00-69038-000	PC kit/Map'n Track CDROM m	99.99	
GPS ColorTRAK	12 ch color GPS/carry case	391.99	279 ⁹⁵
GPS Tracker	12 ch GPS w/wrist strap	321.99	229 ⁹⁵
00-19044-000	Low profile external ant	95.95	
00-19065-000	PC kit/Map'n Track CDROM m	99.99	
00-19067-000	PC cable w/cig adapter	39.99	
Meridian XL	GPS/plot/detach ant/case	396.65	299 ⁹⁵
Pioneer	GPS receiver	139.99	99 ⁹⁵

MAHA (MAH)

AA-FB	1300ma AA NiMH batt cell w/tabs ..ea	\$ 3.50	2 ⁹⁵
AA-T	1200ma AA size NiMH batt cell	ea	3.50
MH-2A4	Slow charger for 4 max AA NiMH ..	11.95	
MH-BP-7	900ma 13.8v Icom nickel hydride ..	69.95	

MAHA - continued

MH-BP-8	1200ma 8.4v lcom nickel hydride ..	59.95
MH-BP-8H	1800ma 8.4v lcom nickel hydride ..	69.95
MH-BP-83	1200ma 7.2v lcom nickel hydride ..	49.95
MH-BP-132B	1200ma 12v lco blk nick hyd/mic ..	59.95
MH-BP-132B	1200ma 12v lco gray nick hyd/mic ..	59.95
MH-BP-173	650ma 9.6v lcom nickel hydride ..	69.95
MH-BP-180	1000ma 7.2v lcom nickel hydride ..	49.95
MH-CNB-152	900ma 12v Sta nickel hydride ..	59.95
MH-CNB-153	1200ma 7.2v Sta nickel hydride ..	49.95
MH-FNB-12	900ma 12v Yaesu nickel hydride ..	59.95
MH-FNB-17	900ma 7.2v Yaesu nickel hydride ..	49.95
MH-FNB-27	900ma 12v Yaesu nickel hydride ..	59.95
MH-FNB-31	650ma 4.8v Yaesu nickel hydride ..	49.95
MH-FNB-38	650ma 9.6v Yaesu nickel hydride ..	59.95
MH-FNB-40H	650ma 7.2v Yae nick hyd/ spg clip ..	59.95
MH-FNB-41	900ma 9.6v Yae nick hyd/spg clip ..	59.95
MH-FNB-V47	1800ma 7.2v Yaesu nickel hyd ..	69.95
V47 Belt Clip	Spring loaded belt clip for Yae ..	9.95
MH-PB-8	1200ma 12v Kenwood nickel hydride ..	62.95
MH-PB-17	900ma 12v Kenwood nickel hydride ..	69.95
MH-PB-18	1200ma 7.2v Ken nick hyd; wall cgr only ..	49.95
MH-PB-32	900ma 6v Kenwood nickel hydride ..	47.95
MH-PB-34	900ma 9.6v Kenwood nickel hydride ..	57.95
MH-C777	Univ cgr/conditioner; nicad/nimh ..	49.95
MHS-CW4	Clip-leads for external charging ..	3.99
MH-101-11	Cgr/lco 157/160/174/131/2/Mah 132B/G ..	69.95
MH-101-13	Cgr/lco 171/172/173/180/Mah BP173 ..	69.95
MH-101-Y1	Cgr; Yae 101/112/127/257/Mah 12/27 ..	69.95
MH-101-Y2	Cgr; Yae FNB31/38/Mah MHFN38 ..	69.95
MH-101-Y3	Cgr; Yae 40/41/42/Mah MHFN41 ..	69.95
MH-800K	500mw spkr/mic w/clip; Kenwood ..	19.95
MH-800S	500mw spkr/mic/clip; Ali/lco/Sta/Yae ..	19.95
MH-800Y	500mw spkr/mic; Yae FT50/VX1R ..	24.95
MH-A101	5/35w 2m FM amplifier ..	69.95
MH-A102	5/35w 2m FM/SSB amp/preamp ..	89.95
MH-A103	5/50w 2m FM/SSB amp/preamp ..	119.95
MH-A104	5/100w 2m FM/SSB amp/preamp ..	229.95
MH-A201	5/45w 2m/5/35w 440 FM amp ..	159.95
MH-A301	5/50w 2m HT dock boost amp/pre ..	115.95
MH-A302	5/45/5/35w 2m/440 HT dock boost ..	165.95
MHS-11	Ico 2G/02/2/32 adapter; A301/302 ..	9.95
MHS-12	Ico 2SAT adapter; A301/302 ..	9.95
MHS-13	Ico 2GXAT/W21AT adapter; A301/302 ..	9.95
MHS-14	Ico W32/31/77/72 adapt; A301/302 ..	11.95
MHS-K1	Ken 25/26/75/77 adapt; A301/302 ..	9.95
MHS-K2	Ken 22/79 adapter; A301/302 ..	9.95
MHS-S1	Standard/ADI adapter; A301/302 ..	9.95
MHS-Y1	Yae 23/411E/470 adapt; A301/302 ..	9.95
MHS-Y2	Yae 26/415/530 adapt; A301/302 ..	9.95
MHS-Y3	Yae FT11/41/51 adapt; A301/302 ..	11.95
MHS-Y4	Yae FT10/40/50 adapt; A301/302 ..	11.95
MH-VOX-K	Deluxe VOX spkr/mic for Kenwood ..	39.95
MH-VOX-S	Dlx VOX spkr/mic; Ali/lco/Sta/Yae ..	39.95

MALDOL (MAL)

ARD-5B	2m/440 0/3.8db 19.6" mob ant Δmw	\$ 59.99	39 ⁹⁵
ARD-6	2m/440 2.6/4.9db 26.8" mob ..Δmwv	70.99	49 ⁹⁵
ARD-10	2m/440 3/5.5db 34.8" mob ..Δwfv	70.99	49 ⁹⁵
ARD-10B	Blk 2m/440 3/5.5db 34.8" ..Δv	70.99	49 ⁹⁵
ARD-12	2m/440 4.3/6.8db 48.8" mob Δmwfv	97.99	69 ⁹⁵
ARD-12B	Blk 2m/440 4.3/6.8db 48.8" ..Δfv	97.99	69 ⁹⁵
ARS-50	6m 1/4 wave 61.2" mobile ..Δmwfv	74.99	49 ⁹⁵
ARS-146	2m 4.1db 56" mobile ant ..Δmwfv	77.99	49 ⁹⁵
ARS-146B	Black 2m 4.1db 56" mobile ..Δwv	77.99	49 ⁹⁵
ARS-440	440 5.5db 38.4" mobile ant ..Δmwfv	67.99	39 ⁹⁵
ARS-440B	Black 5.5db 38.4" mobile ..Δmwfv	67.99	39 ⁹⁵
EX-110	2m/440 3/5.5db 37.8" mob ant Δwfv	64.99	39 ⁹⁵
EX-110B	Blk 2m/440 3/5.5db 37.8" ..Δwfv	64.99	39 ⁹⁵
EX-111	2m/440 3.6/6db 44" mobile ..Δmwfv	77.99	49 ⁹⁵
EX-111B	Blk 2m/440 3.6/6db 44" ..Δwfv	77.99	49 ⁹⁵
FA-50	2m/440 2.1/5.3/2db 18.8" mag ..Δwfv	51.99	39 ⁹⁵
FR-30	2m/440 15" flexible tele whip ..Δmf	52.99	39 ⁹⁵
HS-702S	2m/440 0/3.2db 17.6" duck ..Δmf	19.99	
VM-ZHP	2m 43.2" 3db 300w mobile ..Δmwfv	47.99	29 ⁹⁵

Reg Sale

MALDOL - continued

VM-144HP	2m 71.6" 4.5db 200w ..Δmwv	60.99	39 ⁹⁵
VM-727CR	2m/440 41.6" 3.8/6.2db ..Δm	67.99	39 ⁹⁵
VM-727E	2m/440 58.6" 4.5/7.2db ..Δmwfv	76.99	49 ⁹⁵
VM-727HP	2m/440 36" 3/5.5db 300w ..Δmwfv	53.99	39 ⁹⁵
VM-727RE	2m/440 59.4" 4.5/7.2db ..Δfv	83.99	49 ⁹⁵

MIDLAND (MID)

23-505	1.5-150MHz dual meter SWR/power ..	\$ 24.95
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MIRAGE (MIR)

A-1015G	6m FM/SSB 10/150w amp/preamp	\$389.00	349 ⁹⁵
B-23G	2m FM/SSB 2/30w amp/preampDf	169.00	119 ⁹⁵
B-34	2m FM 2/35w amplifier	69.95	
B-34G	2m FM/SSB 3.5/35w amp/preamp	89.95	
B-55G	50w 2m FM amp for handheld	118.95	109 ⁹⁵
B-215G	2m FM/SSB 2/150w amp/preamp	379.00	339 ⁹⁵
B-216G	2m FM/SSB 4/100w amp/preamp	199.00	179 ⁹⁵
B-320G	2m FM/SSB 50/200w amp/preamp ..	449.95	399 ⁹⁵
B-510G	100w dflx 2m FM amp for HT/mobile ..	224.95	209 ⁹⁵
B-1016G	2m FM/SSB 10/160w amp/preamp ..	379.00	339 ⁹⁵
B-1030G	2m FM/SSB 10/300w amp/preamp ..	689.00	619 ⁹⁵
B-2516G	2m FM/SSB 25/160w amp/preamp ..	299.00	269 ⁹⁵
B-2530G	2m FM/SSB 25/300w amp/preamp ..	689.00	619 ⁹⁵
B-5016G	2m FM/SSB 50/160w amp/preamp ..	299.00	269 ⁹⁵
B-5030G	2m FM/SSB 50/300w amp/preamp ..	669.00	599 ⁹⁵
BD-35	2m/440 3/45/4/35w HT amp	159.95	149 ⁹⁵
CD-22G	220 FM/SSB 2/20w amp/preamp	169.00	154 ⁹⁵
C-111G	220 FM/SSB 2/110w amp/pre ..Δmwfv	339.00	249 ⁹⁵
C-106G	220 FM/SSB 10/60w amp/preamp ..	239.00	214 ⁹⁵
C-1012G	220 FM/SSB 10/120w amp/preamp ..	339.00	299 ⁹⁵
C-1022G	220 FM/SSB 10/220w amp/preamp ..	655.00	589 ⁹⁵
C-2512G	220 FM/SSB 25/120w amp/preamp ..	315.00	289 ⁹⁵
C-2522G	220 FM/SSB 25/220w amp/preamp ..	655.00	589 ⁹⁵
C-5012G	220 FM/SSB 50/120w amp/pre Δmw	334.00	239 ⁹⁵
C-5022G	220 FM/SSB 50/220w amp/pre Δmwfv	639.00	469 ⁹⁵
D-15N	430 FM/SSB/ATV 2/18w type N amp ..	189.00	169 ⁹⁵
D-26N	440 FM/SSB 2/60w type N amplifier ..	269.00	244 ⁹⁵
D-1010N	440 FM/SSB 10/100w type N amp ..	395.00	354 ⁹⁵
D-3010N	440 FM/SSB 30/100w type N amp ..	365.00	329 ⁹⁵
D-1010-ATVN	430 ATV 10/100w type N amp ..	414.00	369 ⁹⁵
RC-1*	Remote control head w/18" cable	45.95	

*Not for B-23/C-22/D-26

The following Repeater Amplifiers are available on Special Order. Specify SO-239 or type N connectors

A-1015NR	6m FM 2/80w type N amplifier ..	\$599.00	539 ⁹⁵
A-1015R	6m FM 2/80w SO-239 amplifier fm	579.00	499 ⁹⁵
B-215NR	2m FM 1/110w type N amplifier ..	579.00	524 ⁹⁵
B-215R	2m FM 1/110w SO-239 amplifier ..	559.00	504 ⁹⁵
B-1016NR	2m FM 2/120w type N amplifier ..	619.00	559 ⁹⁵
B-1016R	2m FM 2/120w SO-239 amplifier ..	599.00	539 ⁹⁵
B-2516NR	2m FM 12/120w type N amplifier ..	569.00	519 ⁹⁵
B-2516R	2m FM 12/120w SO-239 amplifier ..	549.00	499 ⁹⁵
C-211NR	220 FM .5/80w type N amplifier ..	649.00	584 ⁹⁵
C-211R	220 FM .5/80w SO-239 amplifier ..	629.00	564 ⁹⁵
C-1012NR	220 FM 5/90w type N amplifier ..	649.00	584 ⁹⁵
C-1012R	220 FM 5/90w SO-239 amplifier ..	629.00	564 ⁹⁵
C-2512NR	220 FM 15/90w type N amplifier ..	615.00	559 ⁹⁵
C-2512R	220 FM 15/90w SO-239 amplifier ..	595.00	539 ⁹⁵
D-1010NR	440 FM 4/80w type N amplifier ..	654.00	589 ⁹⁵
D-3010NR	440 FM 12/80w type N amplifier ..	625.00	564 ⁹⁵
D-1010-ATVNR	430 ATV 4/80w type N amp ..	654.00	589 ⁹⁵

PREAMPS

KP-1/10M	10m in shack preamp	\$139.00	124 ⁹⁵
KP-1/6M	6m in shack preamp	139.00	124 ⁹⁵
KP-1/2M	2m in shack preamp	139.00	124 ⁹⁵
KP-1/220	220 in shack preamp	139.00	124 ⁹⁵
KP-1/440	440 in shack preamp	139.00	124 ⁹⁵
KP-2/10M	10m mast mount preamp	195.00	174 ⁹⁵
KP-2/6M	6m mast mount preamp	195.00	174 ⁹⁵
KP-2/2M	2m mast mount preamp	195.00	174 ⁹⁵
KP-2/220	220 mast mount preamp	195.00	174 ⁹⁵
KP-2/440	440 mast mount preamp	195.00	174 ⁹⁵

MIRAGE - continued

MP-1	160-10m 25/200/2kw PEP wattmeter ..	\$235.00	219 ⁹⁵
MP-2	6 & 2m 50/500/1.5kw PEP wattmeter ..	235.00	219 ⁹⁵
MP-3	420-450 5/50/500w PEP wattmeter	265.00	249 ⁹⁵
MP-4	1.2 GHz 1/10/100w PEP wattmeter	279.00	259 ⁹⁵

NCG (NCG)

BB-516	Motorcycle intercom set	\$ 89.95	
BIP-514	Motorcycle earph/mic; Ali/Ico/Sta/Yae ..	69.95	
BIP-514K	Motorcycle earphone/mic; Kenwood ..	69.95	
EN-921K	Spkr/mic earpiece; Kenwood ...Dwfv	44.95	29 ⁹⁵
MC-910	Ear/bm mic w/cap-clip/ear hook; not Ken	49.95	
MC-910K	Ear/bm mic w/cap-clip/ear hook; Ken HT	49.95	
MH-900PK	Earpc/bm mic/PTT; Ken HT Dmwfv	39.95	26 ⁹⁵
MP-28	Boom mic/headset/PTT; all HT but Ken	39.95	
MP-28K	Boom mic/headset/PTT for Ken HT ...	39.95	
NCG-2050	1.6-60MHz 30/300/3kw meter	149.95	129 ⁹⁵
NCG-3000	118-530MHz 5/20/200w PEP meter ..	109.95	99 ⁹⁵

Power Pocket	12v 2AH lead acid belt batt/cgr	66.95	
RP-150	20A variable ps/lighted meters/fan	169.95	159 ⁹⁵
RP-300	30A variable ps/lighted meters/fan	259.00	239 ⁹⁵

NAVAL (NAV)

HTS-3	5-15vdc amplified speaker	\$ 29.95
MK-303	Earphone/PTT/mic; lcom HT's	Δv 14.95

NEW WAVE (NEW)

Adventurer	12' extended Portaple alum mast m	\$109.95
Traveler	19' extended Portaple alum mast ..m	124.95
Rover	26' extended Portaple alum mast ..m	149.95
Expeditioner	33' extended Portaple alum mast m	174.95
Explorer	40' extended Portaple alum mast m	199.95
Big Foot	Welded, unpainted park-on mt ..	119.95
Snap-on Mount	Clamp on mt; ant-mast m	19.95

NORCOMM (NOR)

NC-101	Tunable CTCSS encoder	\$ 19.95
NC-104	Programmable CTCSS encoder	24.95
NC-106	Prog CTCSS encoder/decoder	54.95
NC-401	Sub-miniature DTMF decoder	59.95

NYE VIKING (NYE)

ANTENNA TUNERS AND ACCESSORIES

MBV-A	3kw tuner with ant switch & meters	\$879.95
MBV-B	As MBV-A, without meters .....Δmwfv	760.95 649
020-001	2kw low-pass filter	56.95

MASTER KEY

330-001	Black enamel base w/cable, plug ...	\$ 72.95
HEAVY DUTY SPEED-X KEYS WITH NAVY KNOBS		
320-001	No shorting switch	\$ 44.95
320-003	As above, w/shorting switch	51.95
322-001	Brass hardware, no switch	35.95
322-003	As above, w/shorting switch	44.95

STANDARD SPEED-X KEYS

310-001	Black, no shorting switch	\$ 40.95
310-003	As above, w/shorting switch	45.95
312-001	Brass arm, no shorting switch	32.95
312-003	As above, w/shorting switch	39.95

Oak Bay Technologies (OAK)

AM-101B	BNC dock window mount	\$ 24.95	
BS-25	Automatic car battery saver module ..	39.95	
CA-232H	Handheld packet cable ..Δmwfv	34.95	29 ⁹⁵
CA-232U	Universal packet cable ..Δmwfv	34.95	29 ⁹⁵
LP-11P	1.8-30 MHz 1kw low-pass filter	69.95	
LP-50	1.8-54 MHz 1kw low-pass filter	69.95	
PS-101	Hvy duty DC pwr strip/fuses ..Δmf	84.95	64 ⁹⁵
PS-612M	Hvy duty DC pwr strip w/breakers ..	64.95	

Optoelectronics (OPT)

R-10	30-2000MHz FM Interceptor ..Δf	\$299.00	249 ⁹⁵
Climateat	Windshield mt; Scout/400 ..Δmwfv	25.00	14 ⁹⁵
Spectrum	FCC data CDROM/SCOUT prog ..Δm	29.00	19 ⁹⁵
SSB-220A	SSB/gen purp 3GHz bench ctr ..Δwfv	329.00	249 ⁹⁵
BLP-70	Low pass receiving filter ..Δw	40.00	32 ⁹⁵

PRICE LIST

OPTO - continued

CB-232 PC interface cable	39.00	24 ⁹⁵
Optolog Software; 8040/SSB-220A	25.00	6 ⁹⁵
TA-100S 100-600MHz tele whip ant	12.00	9 ⁹⁵

OUTBACKER (OUT)

OB-8 300w PEP 6' 75-10m 8-band mobile ant	\$279.95	
OB-8HP 500w PEP 6' 75-10m 8-band mob ant	299.95	
OB-SB 8-band 300w PEP split ant/storage bag	299.95	
OB-8TRI 3-pc 300w PEP 6' 8-band port ant	329.95	
Outrunner 300w PEP 9' 9-band mobile ant	349.95	
OB-M 300w PEP 6' 75/40/20/17/10m/HF marine	429.95	
Perth 150w PEP 7.5' 75-10m mobile ant	289.95	
Perth Plus 150w PEP 75-10m+6m/2m mob ant	299.95	
Stealth Plus 100w PEP 4' 75-10m+6/2m ant	269.95	
Outreach 300w PEP 12' 160-10m mobile ant	399.95	
Outreach 500 600w PEP 12' 80-6m mob	439.95	
ALP Outpost Base tripod mtg sys for mob ant	199.95	
OB-360 Tnk mt/Spring/coax; Perth/JR8/Perth Plus	99.95	
OB-SB 3/4-24 spring and 1/2" hole base	99.95	
Diamond K-400/3-8C 3/4-24 trunk mt; 6' coax	69.95	
Diamond C-110 10' ext cable; K-400/3-8C	14.95	

PACCOMM (PAC)

APRS port switch	\$ 29.95	
BayMod-25 Modem	45.95	
HandiPacket Small TNC for handhelds	229.95	
PicoPacket TNC, 128K RAM	149.95	
PicoPacket battery model TNC, 128K RAM	209.95	
PicoPacket dual serial port TNC, 128K RAM	199.95	
Spirit-2 Standard high performance controller	239.95	
Tiny-2 Mk-2 Multi-purpose TNC	149.95	
Tiny-2 Mk-2/GPS TNC w/GPS & mag GPS ant	499.95	

PERM-Ferrite Engineers (PAL)

FER-2 RF ferrite toroid kit	\$ 25.95	
LA-1 Loop amplifier; matches loop to Rcvr	99.95	
5-15 MHz plug-in loop (HF-1)	99.95	
1.6-5 MHz plug-in loop (160m, 80m)	99.95	
.55-1.6 MHz plug-in loop (AM broadcast)	99.95	
150-550 KHz plug-in loop (LF, 1750m)	99.95	
40-150 KHz plug-in loop (WWVB, Loran)	99.95	
M-840 Bar graph HF auto SWR/power meter	199.95	189 ⁹⁵
PS-95 AC adapter for M-835/840	15.95	
MDB-2 Mag dipole receiving balun	39.95	24 ⁹⁵
MSB-3 Magnetic switch receive balun Dmfv	135.00	89 ⁹⁵
P-405 1.8-54MHz 20db 9v Rcv preamp Dmfv	149.95	59 ⁹⁵
P-508 2-30MHz 12v active Rcv preamp	99.95	
PCM-1 1-30MHz RF current meter	135.00	129 ⁹⁵
PFS-1 1.8-150MHz field strength meter	195.00	184 ⁹⁵
PK-203 Brass Jones single lever key	230.00	199 ⁹⁵
PT-340 Tuner-Tuner (use with ant tuner)	99.95	
RFI-3 RF interference kit	20.95	
RFI-4 RF interference kit	25.95	
SB-4 2kw 1.7-30 MHz 4:1 balun/SO-239	89.95	
SMB-5 SmartBridge prog. AT computers	29.95	22 ⁹⁵
VLF-A VLF converter; 100-500 KHz to 80m	89.95	
VLF-S VLF conv; 10-500 KHz to 4-4.5 MHz	89.95	

PALSTAR (PLS)

AT-300 300w PEP tuner/switch/dummy/meter	\$129.95	
AT-300CN 300w PEP tuner/sw/dummy/cross meter	139.95	
AT-1500 1500w PEP roller inductor tuner	379.95	

PAR (PAR)

OA-50 6m horizontal omni antenna	\$ 63.95	
OA-144 2m horizontal omni antenna	54.95	
UHFND450 440 dual band notch filter	62.95	
VHFND152 2m dual band notch filter	62.95	
VHFND152HT 2m dual band HT notch filter	68.95	
UHF-12 12" RG58/silver/gold tef PL259s	9.95	

PATCOMM (PAT)

PC-9000 40/5w HF/20w 6m SSB/CW Xcvr	\$799.95	
FM Module for PC-9000	79.95	
RTTY/Decode/Memory for PC-9000	149.95	

Reg Sale

PATCOMM - continued

PC-16000 HF Xcvr/digital modem/keyboard	1649.00	1449 ⁹⁵
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PENETROX (PEN)

Penetrox A 4 oz tube for antennas	\$ 12.95	
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PERCON (PEC)

Spectrum FCC database CDROM	† \$ 29.95	19 ⁹⁵
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Percon Spectrum \$9.95 with any radio! Limited Time!

PERIPHEx (PER)

BP-3 8.4v 350ma battery for lcom	\$ 48.95	39 ⁹⁵
BP-7S 13.2v 1700ma battery for lco	59.95	44 ⁹⁵
BP-8S 9.6v 1700ma battery for lcom	45.95	32 ⁹⁵
BP-83S 7.2v 800ma battery for lcom	43.95	39 ⁹⁵
BP-85S 12v 800ma battery for lcom	76.95	49 ⁹⁵
BP-114S 12v 800ma battery for lcom	83.95	44 ⁹⁵
BP-132 12v 600ma battery for lcom	51.80	36 ⁹⁵
BP-132A 12v 600ma batt for lcom	51.80	36 ⁹⁵
SAT Interna 7.2v 300ma int batt; ZSAT	25.95	19 ⁹⁵
CNB-152 12v 600ma batt; Standard	41.95	29 ⁹⁵
CNB-153 7.2v 1100ma batt; Standard	44.95	39 ⁹⁵
EBP-24S 7.2v 1700ma battery for Ali	40.95	29 ⁹⁵
EBP-34 4.8v 1200ma batt for Alinco	42.40	29 ⁹⁵
EBP-34S 4.8v 1700ma batt; Alinco	46.40	34 ⁹⁵
EBP-35 7.2v 900ma batty for Alinco	65.95	49 ⁹⁵
EBP-36 9.6v 650ma batt for Alinco	60.30	44 ⁹⁵
FNB-11 12v 800ma battery for Yaesu	65.95	44 ⁹⁵
FNB-12 12v 600ma battery for Yaesu	43.95	32 ⁹⁵
FNB-14 7.2v 1100ma batt for Yaesu	42.95	29 ⁹⁵
FNB-14S 7.2v 1700ma batt for Yae	65.95	39 ⁹⁵
FNB-26 7.2v 1100ma batt for Yaesu	45.95	34 ⁹⁵
FNB-26S 7.2v 1700ma batt for Yae	45.95	34 ⁹⁵
FNB-27 12v 600ma battery for Yaesu	40.80	34 ⁹⁵
FNB-27S 12v 800ma batt for Yaesu	65.95	39 ⁹⁵
FNB-33 4.8v 1700ma batt for Yaesu	37.50	29 ⁹⁵
FNB-35 7.2v 600ma batt for Yaesu	46.80	29 ⁹⁵
FNB-38 9.6v 650ma batt for Yaesu	64.30	34 ⁹⁵
PB-1 12v 1000ma batt for Kenwood	75.95	67 ⁹⁵
PB-7S 7.2v 1700ma batt for Ken	59.95	42 ⁹⁵
PB-8S 12v 800ma battery; Kenwood	59.95	39 ⁹⁵
PB-33 6v 1200ma batt for Kenwood	38.95	29 ⁹⁵
Santec ST-142 9.6v 600ma batt; ST142	24.95	19 ⁹⁵

PHILIPS (PHI)

U-105 Light duty rotor	\$ 69.95	
TB-105 Thrust bearing	18.95	

PIPO TOUCH-TONE PADS (PIP)

PK-1 12-digit pad	\$ 71.95	
PK-1K 12-digit pad w/delay relay	78.95	
PK-1M 12-digit pad for surface mtg	71.95	
PK-2 16-digit pad	76.95	
PK-2K 16-digit pad w/delay relay	83.95	
PK-2M 16-digit pad for surface mtg	76.95	
P-7V 12-digit vertical rugged mini pad	58.95	29 ⁹⁵

POLYPHASER (PLY)

LIGHTNING PROTECTION

IS-50NX-C2 125-1000 375/125/50w N flange	\$ 61.95	
IS-50UX-C0 1.5-400 2kw/375/125w flange mt	61.95	
IS-50UX-C1 50-700MHz 375/125w flange mt	61.95	
IS-B50LN-C2 125-1000 375/125/50w N bulkhead	64.95	
IS-B50LU-C0 1.5-400 2kw/375/125w bulkhead	64.95	
IS-B50LU-C1 50-700 375/125w bulkhead mt	64.95	
IS-IE50LU-C0 1.5-400 dtx 2kw/375/125w bulk	129.95	
IS-IE50LU-C1 50-500 dtx 375/125w bulkhead	129.95	
IS-IE50LN-C1 50-700 dtx 375/125w N bulkhead	117.95	
BF Adapter Bulkhead to flange mt adapter	9.95	
FB Adapter Flange to bulkhead mt adapter	11.95	
IS-PLD0-120-15A 120v 15A power protector	172.95	
IS-PLD0-120-20A 120v 20A power protector	215.95	
IS-RCT 8-wire rotor control protector	54.95	
J-1 1/2" to 1/8" bronze transition clamp	8.95	
J-2 1/2" to 2/4" bronze transition clamp	12.95	

POLYPHASER - continued

IS-SPTL Single phone line protector	57.95	
CS112-25 25' 1 1/2" copper strap	25.95	
CS112-50 50' 1 1/2" copper strap	51.95	
CS112-75 75' 1 1/2" copper strap	75.95	
CS112-100 100' 1 1/2" copper strap	100.95	
CS3-25 25' 3" copper strap	51.95	
CS3-50 50' 3" copper strap	100.95	
CS3-75 75' 3" copper strap	150.95	
CS3-100 100' 3" copper strap	197.95	
CS6-25 25' 6" copper strap	100.95	
CS6-50 50' 6" copper strap	197.95	
CS6-75 75' 6" copper strap	299.95	
CS6-100 100' 6" copper strap	391.95	
CU-SPGP Copper single point ground panel	69.95	
TK-2 1 1/2" strap to Rohn twr corrosion free clamp	5.95	
TK-3 1 1/2" strap-2 1/4" to 3/4" mast corr free clamp	8.95	
1C-112S #6-#1 wire to 1 1/2" strap clamp bond	10.95	
20C-112S #2-0 to #4-0-1 1/2" strap clamp bond Dmv	10.95	7 ⁹⁵
SBR-112S 1 1/2" strap to 3/8" rod clamp bond	12.95	
MSC-3 Junc; 2+ 1 1/2" or 3" strap clamp bond	10.95	
UNI-KIT 2CT Gnd kit; coax to alum/tin/galv	29.95	
UNI-KIT 2TC Gnd kit; galv twr leg to copper	32.95	
UNI-KIT 2CC Ground kit; coax to copper	28.95	
UNI-KIT 2TT Ground kit; galv/alum-galv Dmv	35.95	19 ⁹⁵
CCK Copper cleaning kit; 4 oz can, brush	27.95	
GLEP Lightning and EMP Protection book	22.95	

The POUCH (POU)

1R Pouch for Yaesu VX-1R	\$ 14.95	
1OR Pouch for Yaesu FT-10/40/50R	14.95	
508 Pouch for Standard C-108/508A	14.95	
510 Pouch for Standard C-510A	14.95	
G-71 Pouch for Kenwood TH-G71A	17.95	
P-4V Pouch for UBZ-LF14 FRS	14.95	
P-5 Pouch for HT	17.95	
S-1 Short 1 Pouch for HT	17.95	
S-2 Short 2 Pouch for HT	17.95	
S-3 Short 3 Pouch for HT	17.95	
Slim Slim Pouch for HT	17.95	
SS Pouch for TH22AT/TH28A/FT51R&HP	17.95	
T-2A Pouch for HT	17.95	
XF-1 Pouch for Yaesu VXF-1 FRS	14.95	
Chest B/S Chestpouch ser B w/s pocket	29.95	

PREMIER (PRE)

AL-800 2m/440 32" BNC rubber duck ant	\$ 34.95	
RD-8 2m/440 6.5" BNC duck	17.95	
RD-9 2m/440 6.5" BNC duck	18.95	
RD-9SMA 2m/440/900 7" SMA duck	21.95	
RD-78 2m/440 15" BNC whip	22.95	
RD-98 2m/440 17" BNC whip	24.95	
RD-98SMA 2m/440 17" SMA whip	27.95	
PNC-4 2m/440 3/5.5db 40" fold-over mobile	43.95	
MC-2 Super suction & mag mt; NMO/UHF	37.95	
TA-1/UHF UHF-style trunk mt/coax	28.95	18 ⁹⁵
TA-2 Hvy duty rubber coat tnk mt; NMO/UHF Dmv	34.95	24 ⁹⁵
DX-2 2m/440 450/300w dplx/UHF	43.95	26 ⁹⁵
DX-2/Lead 2m/440 450/300w dplx/lead	46.95	29 ⁹⁵
DX-2MN 2m/440 450/300w dplx/N	43.95	24 ⁹⁵
DX-2MNL 2m/440 450/300w dplx/lead/N	46.95	24 ⁹⁵
SB-752 12vdc 6.5A port batt power pack	59.95	
SB-791 5A ps w/cig outlet; not for radio	29.95	6 ⁹⁵
TX-3 2m/440/900-1.2 800/800/200w triplr Dmv	54.95	24 ⁹⁵
SPM-100 Spkr/mic; ADI/Icom/Yaesu	† 27.95	19 ⁹⁵
SPM-101 Speaker/mic for Kenwood	† 29.95	19 ⁹⁵
SPM-102 Speaker/mic for Yaesu FT-50R	† 33.95	19 ⁹⁵
SPM-200 Lapel mic/earph; ADI/Icom/Yaesu	18.95	
SPM-200E Lapel mic/earhook; ADI/Ico/Yae	21.95	
SPM-201 Lapel mic/earphone for Kenwood	19.95	
SPM-201E Lapel mic/earhook for Kenwood	23.95	
SPM-202 Lapel mic/earphone; Yaesu FT-50R	20.95	
SPM-202E Lapel mic/earhook; Yaesu FT-50R	24.95	
SPM-300 Spkr/mic/lock/volume; ADI/Ico/Yae	34.95	

PREMIER - continued

SPM-301	Sprk/mic/PTT lock/volume; Ken	39.95
SPM-400	Boom/mic; ADI/Icom/Yaesu	25.95
SPM-401	Boom/mic for Kenwood	27.95
SPM-402	Boom/mic for Yaesu FT-50R	29.95
SPM-500	Throat/mic/earph; ADI/Icom/Yaesu	59.95
SPM-501	Throat/mic/earphone for Kenwood	61.95
SPM-502	Throat/mic/earphone; Yaesu FT-50R	62.95

PRO AM by VALOR

VHF/UHF ANTENNAS ONLY (No Mounts)	
M0144-440	2m/440 antenna
PAQA	136-515 MHz 1/4 wave antenna
PAQ-144	2m 1/4 wave antenna
PAQ-435	440 1/4 wave antenna
PAQ-3820	2m 1/4 wave whip w/24 thread
PBH-144	2m 1/4 wave 3 db antenna
PUB-440	440 5 db antenna

MOUNTS ONLY FOR ABOVE ANTENNAS

PAM	Low profile magnet mount w/coax
PAMB	Black low profile mag mount w/coax
PAS	3/4 surface mount w/coax
PASMO	3/4 surface mt only (no coax)
PAS38	3/4 surface mount w/coax
PAS38MO	3/4 surface mt only (no coax)
PAT-2	No hole trunk mount w/coax
PAT-2B	Black no hole trunk mount w/coax
PAT-3	Swivel NMO-style trunk mt w/coax

OTHER VHF/UHF ANTENNAS & MOUNTS

77BNC	2m/440 12" 0.2-1db BNC rubber duck
144BNC	2m 12" 1/4 wave rubber duck w/BNC
220BNC	220 10" 1/4 wave rubber duck w/BNC
450BNC	440 6" 1/4 wave rubber duck w/BNC
BNC-SC	Suction cup extension; rubber ducks
WMSL-BNC	Window clip for rubber ducks
82BNC	Magnet mt for BNC w/coax
101ADN	HD aluminum mirror mt w/SO-239
301	1/4-24 magnet mt only w/coax
401	Low profile 1/4-24 mag mt only w/coax
DAK	Mt for 2 vert ants or horizontal dipole
GM-100AD	SS GM 1/4-24 mirror mt w/SO-239
GM-144	2m 2.5db on glass antenna
GM-270	2m/440 2.6/6.3db on glass antenna
TEMKD	On glass replacement mt kit
MM-3401	Maxi-mag mt 1/4-24 kit (3-5" mags)
SS-100MOT	3-way NMO mirror mt w/coax
CX-144/CX-144B	2m 1/4 wave 3db 1/4-24 whip
MM-270B	2m/440 mini mag mt w/BNC
PAQM	144-450 MHz 1/4 wave BNC mag ant
PM-144-440BN	2m/440 BNC mag mt ant
TGS	30-1200MHz on-glass scanner ant
VAA-002	144-450 1/4 wave mag ant
VAA-002BN	144-450 1/4 wave BNC mag ant
VAA-002B	144-450 black 1/4 wave mag mt ant
VAA-002BBN	144-450 black 1/4 wave BNC mag ant
120	Sawtooth hump mt for mobile radios
D-270	2m/440 100w duplexer
DB-240	2m/440 base station antenna

MOBILE HF ANTENNAS (No Mounts)

AB-5	75/40/20/15/10m antenna
PHF-160	160m 8' 3/4-24 whip
PHF-75	75m 8' 3/4-24 whip (4' coil, 4' whip)
PHF-40	40m 8' 3/4-24 whip (4' coil, 4' whip)
PHF-30	30m 8' 3/4-24 whip (4' coil, 4' whip)
PHF-20	20m 8' 3/4-24 whip (4' coil, 4' whip)
PHF-17	17m 8' 3/4-24 whip (4' coil, 4' whip)
PHF-15	15m 8' 3/4-24 whip (4' coil, 4' whip)
PHF-12	12m 8' 3/4-24 whip (4' coil, 4' whip)
PHF-10	10m 8' 3/4-24 whip (4' coil, 4' whip)
PHF-6	6m 8' 3/4-24 whip (4' coil, 4' whip)
103S	Quick disconnect/5 twist lock connectors

QSL Card Holders (ART)

QSL Card Holders, pack of 3, 20 cards/holder \$2.95

Reg Sale

RF APPLICATIONS (RFA)

P-1500	1.8-30 MHz digital power/SWR meter
P-1500-P	Power supply for P-1500
P-2000A	1.8-30 MHz dig power/SWR meter
P-2000CW	1.8-30 MHz audible (CW) meter
P-3000	Deluxe 1.8-30MHz digital power/SWR
P-3000-P	Power supply for P-3000, etc.
Match Alert	VSWR monitor/alarm

RF CONCEPTS (RFC)

144	2m FM mini-amp 2/30w amp
144P	2m FM mini-amp 2/30w amp/preamp
VHF1-60	2m 1/60w FM HT amplifier
2-23	2m FM/SSB 2/30w amp/pre
MAX-AMP-10	2m FM/SSB 10/150w amp/preamp
MAX-AMP-45	2m FM/SSB 45/150w amp/preamp
270	2m/440 FM 3/30/5/20w HT amp
270G	2m/440 FM 3/30/5/20w HT amp/pre
440	440 FM mini-amp 3/20w amplifier
440P	440 FM mini-amp 3/20w amp/preamp
UHF-50	440 3/50w FM HT type N amp
4-110	440 FM 10/100w N amp/preamp
4-310	440 FM 30/100w N amp/preamp

RF LIMITED (RFL)

DF-4000	4kw PEP low pass filter
DF-7000	7kw PEP low pass filter
DF-10000	10kw PEP low pass filter
HL-35NP	2m 5-5/20-35w amplifier
HL-35P	2m 5-5/20-35w amp/pre
HL-62V	2m 5-10/6-60w amp/preamp
HL-36U	440 5-12/30w amplifier

RF PARTS (See Diamond)

RF PRODUCTS (RFP)

199-416	BNC mag mt, 10' coax w/BNC
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RMS (RMS)

CN-220	1.8-225MHz 1.5kw PEP meter
PA-546	2m 5/45w amplifier
W-450	140-170/430-470 150w meter

RACOM (RCO)

700	Automatic morse code identifier
700-PC	Programming kit

Radio Amateur Callbook

077977	1997 World Radio TV HB
077985	1998 World Radio TV Handbook
RACD05	1998 North Am/International CDROM

RADIO PUBLICATIONS

087034	All About Cubical Quad Antennas
087042	Beam Antenna Handbook
087050	All About VHF Amateur Radio
087069	Radio Amateur Antenna Handbook
087077	Simple, Low Cost Wire Antennas
087093	Interference Handbook
087107	All About Vertical Antennas

RAMSEY (RAM)

AA-7	Active antenna kit
AF-1	Hi-Q CW audio filter kit
AR-1	Aircraft receiver kit
CS-1	Crystal radio set kit
CW-7	CMOS keyer kit
DF-1	Foxtound direction finder kit
DN-1	Nicad conditioner/fast charger kit
FM-1	300' FM broadcast transmitter kit
FM-4	Hi power FM broadcast transmitter kit
FR-1	FM broadcast receiver kit
HR-20	20m receiver kit
HR-40	40m receiver kit
HR-80	80m receiver kit
PR-10	2m preamp kit
QRP-20	20m CW transmitter kit

RAMSEY - continued

QRP-40	40m CW transmitter kit
QRP-80	80m CW transmitter kit
RFS-1	RF sensed switch kit
SCA-1	SCA decoder kit
SR-1	Shortwave receiver kit
TS-1	CW touch paddle switch kit
UT-5	Universal timer kit
VS-1	Voice activated switch kit
WA-10	BNC telescopic whip antenna

ROHN TOWERS (ROH)

HBX-40/BXB-6	40' tower, 10 sq ft, 228 lbs *T \$494.70
HBX-48/BXB-7	48' tower, 10 sq ft, 303 lbs *T \$660.50
HBX-56/BXB-8	56' tower, 10 sq ft, 385 lbs *T \$828.00
HDX-40/BXB-7	40' tower, 18 sq ft, 281 lbs *T \$618.50
HDX-48/BXB-8	48' tower, 18 sq ft, 363 lbs *T \$825.00

*Drop-shipped from factory

On factory drop-shippings we prefer payment in full with order, however, we will accept your credit card with the understanding that we will process the charge when we order the merchandise from the factory. This means that you may be billed before you receive your drop-shipped merchandise. Shipment is FOB the Rohn factory, which has various locations, via truck, COB for freight charges only. Freight charges will be collected upon delivery by the carrier. Please allow sufficient time for delivery on these drop-shipped towers. Most truck lines will not unload the tower for you, so please be sure to have enough manpower and/or equipment on hand when your tower is delivered by the carrier.

Note: Rohn states that "antennas developing a large twisting moment due to wind must not be used on HBX/HDX-series towers. Antennas should be limited to those having a maximum boom length of 10 ft."

Other Rohn Towers available on Special Order

ROSETTA (ROS)

WINRADIO	.5MHz-1.3GHz Rcv card/soft/cell bkld \$699.95
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SGC (SGC)

04-01	SG-2000 150w 1.8-30 MHz 12v Xcvr
04-06	SG-2000 Slim Pack Xcvr (no head)
04-11	Std SG-2000 rem head/bkt/20' cable
04-15	Remote mobile head/mem ch's only
04-10	SG-2000 Xcvr w/DSP/PowerTalk head
04-23	SG-2000 Xcvr/DSP/PowerTalk remoted
04-12	Remote kit w/swivel bkt & cable
04-13	Remote kit w/5-way mount & cable
04-14	Rem kit w/suction cup mt & cable
04-22	PowerTalk remote head
51-82	Fan kit for continuous duty xmit
52-31	Waterproof military handset
52-32	Telephone handset
52-34	RS-232 interface; SG-2000 Xcvr
52-47	Shock/military mounting tray
52-51	CA-1 High voltage feed wire .per ft.
52-52	CA-2 RG-58 coax cable .per ft.
52-53	CA-230 Ant coupler cable .per ft.
52-54	CA-2000 Remote head cable per ft.
53-04	PS-30 30A/40A peak unreg ps
53-05	PS-50 50A/70A peak unreg ps
52-61	PSC12-1 12' ps cable, 1 plug
52-62	PSC12-2 12' ps cable, 2 plugs
05-01	SG-2020 Mini 20w PEP QRP Xcvr/mic
52-96	SG-500 1.8-24MHz 12v 500w PEP amp
56-40	SG-7200 DSP HF Smartmodem/Emailer
70-07	PowerClear add-on DSP unit
54-12	SG-230 200w 1.8-30 MHz 12v Smarttuner
54-61	25' extension cable
54-62	50' extension cable
54-63	SmartLock; tuners made after 9/1/93
54-15	SG-235 500w 1.8-30MHz 12v Smarttuner
54-16	SmartPro 200w 1.6-30MHz 12v tuner
54-17	SG-231 HF+6m 12v Smarttuner
55-04	SG-103 1.8-30MHz 150w dipole
55-06	SG-104 2-28 MHz 90' 1kw dipole
55-27	SG-303 1.8-30 9' mobile whip & mt
55-67	Replacement whip for SG-303
55-28	SG-307 1.8-60 7' mobile whip & mt

PRICE LIST

SGC - continued

	Reg	Sale
55-45 QMS Quick universal mt system	490.00	369 ⁹⁵
55-46 QMS-1 Quick mt system w/SG230 Dm	1085.00	769 ⁹⁵
55-47 QMS-2 Quick mt sys w/SG-230/303 whip	1580.00	895 ⁹⁵
55-48 QMS-3 500w antenna system	2580.00	2169 ⁹⁵
55-49 QMS-7 Quick mt sys w/SG-231/307 whip	1430.00	1299 ⁹⁵
56-15 External ARQ/FEC system	1200.00	1069 ⁹⁵

SANGEAN (SAN)

ATS-303 AM/FM/shortwave portable receiver	\$119.00	89 ⁹⁵
ATS-606A AM/FM/shortwave portable receiver	249.00	169 ⁹⁵
ATS-818 AM/FM/shortwave portable receiver	299.00	179 ⁹⁵
ATS-818CS AM/FM/SW port Rcvr w/cassette	359.00	229 ⁹⁵
ATS-909 AM/FM/shortwave portable receiver	389.00	279 ⁹⁵
DT-200V AM/FM/VHF TV sound dig port Rcvr	79.95	
SR-71 AM/FM micro size receiver	34.95	

SEQUOIA (SEQ)

POCKET PC REF Pocket PC reference book ...	\$ 14.95
POCKET REF Pocket reference book	9.95

SHURE (SHU)

526T Series II Dynamic amplified desk mic	\$129.00	119 ⁹⁵
R96 Replacement cartridge	26.95	

SMILEY ANTENNA (SMI)

270A 2m/440 gain telescopic whip	\$ 19.95
270A/SMA 2m/440 gain tele whip w/SMA	19.95
5/8 SLD-2 2m 3/4 Slim Duck rubber ant	17.95
5/8 SLD-220 220 3/4 Slim Duck rubber ant	17.95
5/8 SLD-440 440 3/4 Slim Duck rubber ant	17.95
5/8 SLD-2 Combo 2m 3/4 duck & stubby ant ..	24.95
5/8 SLD-220 Combo 220 3/4 duck & stubby ant	24.95
5/8 SLD-440 Combo 440 3/4 duck & stubby ant	24.95
FLX 1/2 WAV-2M 1/2 wv 2m BNC whip/flex coil	25.95
RD-2 2m rubber duck antenna	14.95
RD-220 220 rubber duck antenna	14.95
RDMD-2 2m mini rubber duck antenna	14.95
RDMD-220 220 mini rubber duck antenna	14.95
RDMD-440 440 mini rubber duck antenna	14.95
RDS-2 2m stubby rubber duck antenna	14.95
RDS-220 220 stubby rubber duck antenna	14.95
RDS-440 440 stubby rubber duck antenna	14.95
SD-2 2m Slim Duck thin rubber antenna	14.95
SD-220 220 Slim Duck thin rubber antenna ..	14.95
SL-440 440 slimline type duck	12.95
SS-II Super Stick 220 3/4 wv telescopic ant ..	19.95
SS-III Super Stick 220 3/4 wv telescopic ant ..	19.95
SS-IV Super Stick 440 3/4 wv telescopic ant ..	19.95
SS-II/Combo 2m 3/4 wv telescopic & stubby ant	26.95
SS-III/Combo 220 3/4 wv telescopic & stubby ant	26.95
SS-IV/Combo 440 3/4 wv telescopic & stubby ant	26.95
TAQ-2 2m 3/4 wave stainless whip	10.95
TAQ-220 220 3/4 wave stainless whip	10.95
TAQ-440 440 3/4 wave stainless whip	10.95
TS Thin Stick 2m/220 3/4 wave telescopic whip	16.95

SOLARCON (SOL)

A-99 10m fiberglass base station antenna ..	\$ 74.95	64 ⁹⁵
GP-1 Ground plane radial kit	39.95	

SOLDER-IT (SLD)

ALP-21D Alum solder paste, 7.1gm	\$ 6.00	2 ⁹⁵
SP-7D Solder paste, 7.1 gm	6.95	2 ⁹⁵

SONY (SON)

RM-KW100 Wireless infrared keyboard	\$ 99.95	79 ⁹⁵
RFU-W100 RF adaptor	49.95	19 ⁹⁵

SHORTWAVE

ICF-2010 AM/FM/SW/LW/air port Rcvr w/p.s. ...	\$449.95	359 ⁹⁵
ICF-SW10 AM/FM/SW compact receiver	59.95	49 ⁹⁵
ICF-SW15 AM/FM/SW port receiver	89.95	49 ⁹⁵
ICF-SW30 AM/FM/SW portable receiver	129.95	99 ⁹⁵
ICF-SW40 AM/FM/SW port receiver	149.95	129 ⁹⁵
ICF-SW55 AM/FM/SW port receiver	449.95	349 ⁹⁵
ICF-SW77 AM/FM/SW portable receiver	649.95	469 ⁹⁵

SONY - continued

ICF-SW100S AM/FM/SW portable receiver	479.95	349 ⁹⁵
ICF-SW100T AM/FM/SW port Rcvr w/cassette	599.95	499 ⁹⁵
ICF-SW7600G AM/FM/SW portable receiver ..	229.95	189 ⁹⁵
AC-E60HG 6vdc 400ma AC adaptor	22.99	
AN-1 LW/MW/SW outdoor active rcv ant	119.95	99 ⁹⁵
AN-3 Aircraft active receive ant	99.95	39 ⁹⁵
AN-102 LW/MW/SW indoor active rcv ant ...	89.95	79 ⁹⁵

STANDARD (STA)

C-156A 2m FM HT w/AA batt holder	\$289.00	199 ⁹⁵
CAW-151B 12vdc ps cable	18.95	14 ⁹⁵
CAW-152B Cig cord w/filter	28.95	22 ⁹⁵
CHP-111 Headset mic/PTT switch	48.95	39 ⁹⁵
CHP-150 Headset mic w/VOX	87.95	62 ⁹⁵
CMB-600 Helmet clip for CHP-150	14.95	12 ⁹⁵
CLC-157 Soft case; CNB-157	23.95	19 ⁹⁵
CLC-158 Leather case; CNB155/156	24.95	19 ⁹⁵
CMB-112 Mounting bracket	27.95	19 ⁹⁵
CMC-150 Mobile charger	28.95	19 ⁹⁵
CMP-111 Speaker/mic	58.95	54 ⁹⁵
CMP-115 Mini speaker/mic	53.95	39 ⁹⁵
CNB-155 4.8v 600ma 2.5w nicad	30.95	22 ⁹⁵
CNB-156 6v 600ma 2.5w nicad	33.95	24 ⁹⁵
CNB-157 9.6v 600ma 5w nicad	42.95	34 ⁹⁵
CNB-158 6v 1200ma 2.5w nicad	44.95	32 ⁹⁵
CSA-181AB Desk rapid charger	82.95	69 ⁹⁵
CTN-115 CTCSS decoder	70.95	49 ⁹⁵
CWC-156A Cgr; CNB155/156/157/158	9.95	8 ⁹⁵
C-558A 2m/440 HT/batt/cgr/TT/ctcss	665.00	549 ⁹⁵
C-558A 2m/440/1.2 HT/batt/cgr/TT/ctcss	699.00	539 ⁹⁵
C-628A 440/1.2 HT/batt/cgr/TT/ctcss	727.00	599 ⁹⁵
CAX-02 Bottom cover	12.95	8 ⁹⁵
CAX-03 Bottom cover	12.95	9 ⁹⁵
CAW-150 Mobile power supply cable	18.95	14 ⁹⁵
CAW-151 12vdc power supply cable	14.95	12 ⁹⁵
CAW-152 Cig cord w/filter	30.95	26 ⁹⁵
CBT-151 Battery case	22.95	21 ⁹⁵
CBT-171 6 cell battery case	21.95	16 ⁹⁵
CBT-175 2 cell battery case	17.00	6 ⁹⁵
CHP-111 Headset mic/PTT switch	48.95	39 ⁹⁵
CHP-150 Headset mic w/VOX	87.95	62 ⁹⁵
CMB-600 Helmet clip for CHP-150	14.95	12 ⁹⁵
CLC-152 Lrg case; C158A/CNB152/153	26.00	16 ⁹⁵
CLC-171 Soft case for CNB-171	30.95	20 ⁹⁵
CLC-172 Soft case for CNB-172/173	30.95	20 ⁹⁵
CLC-175 Soft case for CBT-175	30.95	20 ⁹⁵
CLC-520 Std carry case; 228A/528A	26.95	19 ⁹⁵
CLC-521 Large carry case; 228A/528A	29.95	24 ⁹⁵
CLC-550 Standard carry case; 558A	29.95	28 ⁹⁵
CLC-552 Leather case; 528A/558A	34.95	24 ⁹⁵
CLC-555OR Orange carrying case	35.95	34 ⁹⁵
CLC-560 Case; CBT171/CN-171; 568A	27.95	19 ⁹⁵
CLC-561 Case; CNB172/173; C-568A	27.95	19 ⁹⁵
CLC-562 Leather case; CBT171/CNB171	52.95	39 ⁹⁵
CLC-563	34.95	
CMB-111 Mobile bracket	22.95	15 ⁹⁵
CMB-112 Mounting bracket	27.95	19 ⁹⁵
CMC-150 Mobile charger	28.95	19 ⁹⁵
CMP-111 Speaker/mic	58.95	54 ⁹⁵
CMP-115 Mini speaker/mic	53.95	39 ⁹⁵
CMP-123 Ear phone spkr/mic	63.95	54 ⁹⁵
CMU-161 200 channel memory	48.95	46 ⁹⁵
CNB-151 Extra 7.2v 700ma nicad	82.95	59 ⁹⁵
CNB-152 12v 600ma nicad battery	99.95	84 ⁹⁵
CNB-153 7.2v 1000ma nicad batt	99.95	79 ⁹⁵
CNB-171 7.2v 700ma nicad battery	80.95	59 ⁹⁵
CNB-172 12v 600ma nicad battery	127.00	89 ⁹⁵
CNB-173 7.2v 1100ma nicad	99.00	69 ⁹⁵
CSA-181AB Desk rapid charger	82.95	69 ⁹⁵
CWC-156A Cgr; CNB152/162/172	9.95	8 ⁹⁵
CLC-160 Mini carrying case; C-168A	26.95	19 ⁹⁵
CNB-160 Mini 6v 300ma nicad; 168A	72.00	29 ⁹⁵
CNB-161 Mini 7.2v 700ma nicad; 168A	78.95	59 ⁹⁵
CNB-162 Mini 12v 600ma nicad; 168A	130.00	89 ⁹⁵

STANDARD - continued

CNB-184 6v 700ma batt; 188A/288A	69.95	
C-108A 200mw 2m FM HT	269.00	199 ⁹⁵
C-508A 280mw 2m/440 FM HT	345.00	259 ⁹⁵
CBH-160 Molded belt clip	12.95	8 ⁹⁵
CHP-111 Headset mic/PTT switch	48.95	39 ⁹⁵
CHP-150 Headset mic w/VOX	87.95	62 ⁹⁵
CMB-600 Helmet clip for CHP-150	14.95	12 ⁹⁵
CLC-401 Standard soft case; 108A	16.95	12 ⁹⁵
CLC-402 Dlx soft case/belt loop; 108A	23.95	16 ⁹⁵
CLC-502 Standard soft case; 508A	18.95	16 ⁹⁵
CLC-503 Dlx soft case; 108A/508A	19.95	13 ⁹⁵
CMP-111 Speaker/mic	58.95	54 ⁹⁵
CMP-115 Mini speaker/mic	53.95	39 ⁹⁵
CMP-123 Ear phone spkr/mic	63.95	54 ⁹⁵
CNB-401 Nicad battery	22.95	14 ⁹⁵
CSA-401A Desk charger	48.95	34 ⁹⁵
C-510A 2m/440 FM HT	359.00	279 ⁹⁵
CHP-111 Headset mic/PTT switch	48.95	39 ⁹⁵
CHP-150 Headset mic w/VOX	87.95	62 ⁹⁵
CMB-600 Helmet clip for CHP-150	14.95	12 ⁹⁵
CLC-510 Standard soft case; 510A	29.95	19 ⁹⁵
CLC-511 Leather case; C-510A	29.95	19 ⁹⁵
CMA-510A Mobile adapter; C-510A	99.95	59 ⁹⁵
CMP-115 Mini speaker/mic	53.95	39 ⁹⁵
CMP-123 Ear phone spkr/mic	63.95	54 ⁹⁵
CMP-127 Microphone for C-510A	69.95	49 ⁹⁵
CNB-510 3.6v 700ma nicad; 510A	33.95	26 ⁹⁵
CPB-510DA 50/35w amp/pre; 510A	429.00	329 ⁹⁵
CSA-510A Rapid desk cgr; 510A	89.95	59 ⁹⁵
C-1208DA 50w 2m FM Xcvr w/TPP	549.00	429 ⁹⁵
CAW-561 6.5' mic extension cable	36.95	24 ⁹⁵
CAW-562 13' mic extension cable	48.95	34 ⁹⁵
C-5718DA 50/40w 2m/440 FM/packet	849.00	699 ⁹⁵
CAW-570 Split cable for microphone	63.95	44 ⁹⁵
CAW-571 6.5' mic extension cable	49.95	39 ⁹⁵
CAW-572	54.95	
CAW-579 Packet cable	32.95	29 ⁹⁵
CRC-5700 Front panel w/freq disp	239.00	169 ⁹⁵
CAW-573 6.5' fnt panel extension cbl	28.95	19 ⁹⁵
CAW-574 13' fnt panel extension cbl	39.95	29 ⁹⁵
C-5900DA 45w 6m/50w 2m/35w 440 FM	1049.00	889 ⁹⁵
CAW-590 Split cable for mic	55.95	49 ⁹⁵
CAW-591 10' extension cbl; LCD disp	40.95	34 ⁹⁵
CAW-592 16' extension cbl; mic/spkr	57.95	44 ⁹⁵
CAW-593 26' extension cbl; mic/spkr	74.95	54 ⁹⁵
CMB-5900 Mounting bkt for display	27.95	24 ⁹⁵
CMU-161 200 channel memory	48.95	46 ⁹⁵
CSK-15 External speaker	47.95	39 ⁹⁵
CCR-708A 50-905 spectral disp Rcvr/cell blkd	759.95	699 ⁹⁵

STARTEK (STR)

1350 1-1300 MHz frequency counter	\$139.00	119 ⁹⁵
ATH-15 1-1500MHz bar graph freq counter ..	235.00	189 ⁹⁵
ATH-30 1-2800MHz bar graph ctr w/1-shot ..	299.00	249 ⁹⁵
ATH-30/HS 2800MHz/1-shot/hi-stability	424.00	349 ⁹⁵
ATH-50 5Hz-2800MHz bar/auto trig/hi speed	339.00	299 ⁹⁵
ATH-50/HS 2800MHz/trig/hi sp/hi stability	464.00	399 ⁹⁵
APA-9/VPA-9 9vdc auto power adapter	7.95	
RD-2750 27-50MHz rubber duck antenna ..	19.95	
RD-150 150MHz rubber duck ant	16.95	12 ⁹⁵
RD-450 450MHz rubber duck ant	16.95	12 ⁹⁵
RD-800 800MHz rubber duck antenna	16.95	
TA-90 Telescopic antenna	12.95	
TA-90L Right angle telescopic antenna	16.95	
DC-5 BNC to clip leads cable	12.95	9 ⁹⁵
M-207-IC Interface cable	10.95	8 ⁹⁵
CC-90 Carrying case	12.95	
BP-150 130 - 500 MHz bandpass filter	49.95	
HP-400 400 - 1500 MHz bandpass filter	49.95	
HP-800 800 MHz - 2 GHz bandpass filter ..	49.95	
LP-60 DC - 60 MHz bandpass filter	49.95	
DC-10 Direct probe	22.95	19 ⁹⁵
LP-22 Lo-pass probe	29.95	24 ⁹⁵
P-60 Probe, 60MHz scope, 200MHz FC	29.95	24 ⁹⁵

STARTEK - continued

P-100 Probe, 100MHz scope, 300MHz FC Δmf	39.95	29 ⁹⁵
P-110 Probe, 200MHz scope, 500 MHz FC	69.00	49 ⁹⁵

TAB Books (TAB)

447748 Shortwave Listener's Q & A Book Dm	\$ 14.95	9 ⁹⁵
640967 Amateur Radio Encyclopedia	29.95	
641351 Shortwave Radio Listening for Beginners	12.95	
643478 Complete SW Listener's Handbook	21.95	
643540 Beginner's Handbook of Amateur Radio	24.95	
765340 Build Your Own SW Antennas ...Dmw	16.95	10 ⁹⁵

TIMEWAVE/AEA

TIMEWAVE (TIM)

DSP-9 PLUS Advanced dig sig processing unit	\$209.95	
DSP-95 PLUS Dlx dig signal processing unit	269.95	
DSP-599zx All-mode DSP noise filter	399.95	
DSP-59Y DSP filter module for Yaesu SP-5/6	389.95	
(AEA) AC-4 12vdc 1.5A power supply	19.95	
DSP-RTTY RTTY prog; DSP-599zx/DSP-59Y	69.95	
Upgrade 3.0 DSP-9 to version 3.0 kit	30.95	

TIMEWAVE/AEA DATA/SOFTWARE (AEA)

DC-1 Cigarette lighter cord	\$ 7.95	
KK-1 Keyboard keyer for IBM PC	199.95	
PK-12 1200 bps VHF/UHF packet controller	99.95	
100K/PK-12 100K MailDrop upgrade; PK12	39.95	
AC-1 12vdc 600 ma adaptor	15.95	
PK-96/18K 9600 baud packet controller/32K RAM	169.95	
100K 100K memory upgrade for PK-96	39.95	
PK-96/100K 9600 baud control/128K RAM	199.95	
AC-1 12vdc 600 ma adaptor	15.95	
PC Pakratt Lite. Packet only terminal prog	49.95	
DSP-2322 Multi-mode data controller	399.95	
DSP-1232 Single port multi-mode controller	850.00	399 ⁹⁵
DSP-2232 Switchable ch multi-mode control	499.95	
6000 bps modem card option for PK-900	75.95	
AC-4 12vdc 1.5A power supply	19.95	
ACARS Aircraft data reception software	90.95	
ACARS/900 Air data reception soft; PK900	50.95	
AEA-FAX III-900 PK-900/IBM FAX software	75.95	
PC-Pakratt II w/FAX IBM prog; 12/88/232	69.95	
PC-Pakratt for Windows 2.0 IBM; 12/88/232	79.95	
Log Windows 3.0 Program for IBM	49.95	
IH CABLE PK-232 - Ico/Yae/Ali Ht	25.95	19 ⁹⁵
IM CABLE PK232 - Ico 8pin mic cbl Dmwf	25.95	19 ⁹⁵
IW CABLE PK232 - Icom W2A cable Dmwf	25.00	9 ⁹⁵
KH CABLE PK-232 - Ken Ht cable	25.95	19 ⁹⁵
YM CABLE PK-232 - Yae 8pin mic cbl	25.95	19 ⁹⁵
Technical manual; PK-232MBX	25.95	
WeFax-256 WX FAX prog; DSP1232/2232	129.95	
AA.COM SWR curve IBM soft; 121 & V/U Dmfv	75.00	49 ⁹⁵
AEA-FAX III Facsimile & wire photo program	149.95	99 ⁹⁵
DM-1 2m/220/440 FM deviation meter	169.95	
IDR-96 5w 441.05MHz data Xcv/9600 Δmfv	499.00	379 ⁹⁵
Morse University II Morse code Windows soft	39.95	
PCB-88 IBM plug-in packet adapter	179.00	99 ⁹⁵

TRIPP LITE (TRI)

PR-7 5A power supply, 7A surge	\$ 55.00	49 ⁹⁵
PR-10 7.5A power supply, 10A surge	79.00	69 ⁹⁵
PR-12 9A power supply, 12A surge	85.00	74 ⁹⁵
PR-20 16A power supply, 20A surge	125.00	99 ⁹⁵
PR-30 24A power supply, 30A surge	172.00	129 ⁹⁵
PR-40 32A power supply, 40A surge	211.00	169 ⁹⁵
PR-50 37A power supply, 50A surge	262.00	199 ⁹⁵
PR-60 48A power supply, 60A surge	309.00	239 ⁹⁵
TL-11 Trim Line small low prof 8A ps Δmfv	85.00	49 ⁹⁵
TL-11 Trim Line large low prof 8A ps Δmfv	97.00	59 ⁹⁵
BC PERS-280 Standby UPS 280VA	119.00	69 ⁹⁵
BC PERS-420 Standby UPS 420VA	156.00	109 ⁹⁵
BC INTERNET-325 Stdby UPS 325VA	165.00	99 ⁹⁵
BC INTERNET-450 Stdby UPS 450VA	199.00	119 ⁹⁵
BC INTERNET-675 Stdby UPS 675VA	299.00	179 ⁹⁵
IBAR-12 Rack mt 12-out surge suppress	169.00	69 ⁹⁵
ISOBAR-4 4 outlet premium surge suppressor	79.95	49 ⁹⁵

TRIPP LITE - continued

ISOBAR-6 6 outlet premium surge suppressor	99.95	59 ⁹⁵
ISOBAR-8 ULTRA 8 outlet surge suppressor/LEDs	116.95	79 ⁹⁵
MT-6+ 6 outlet console surge suppressor	149.95	99 ⁹⁵
SUPER-7 7 outlet surge suppressor	27.95	19 ⁹⁵
SUPER-7+TEL 7 outlet/fax modem surge	38.95	29 ⁹⁵
TR-6 Surge Alert 6 out super suppressor Δmfv	59.95	24 ⁹⁵
TR-6FM Surge Alert+Tel 6 out super suppressor	69.95	49 ⁹⁵
PV-140 140w solid state 12vdc-115vac inverter	61.25	49 ⁹⁵
PV-300 300w solid state 12vdc-115vac inverter	89.95	74 ⁹⁵

TUBES (TUB)

6146W Tube	\$ 26.95	
12BY7A Tube	12.95	
3-500G High dissipation tube (3-500Z)	119.95	
3-500Z	199.95	
572B For Yaesu, etc.	49.95	
811A For Collins, etc.	19.95	

Also see EIMAC

TUNE BELT (TUN)

HH-1PS Up to 5" HT radio belt	Δmfv \$ 19.95	9 ⁹⁵
HH-1PM Up to 6" HT radio belt	Δmfv 19.95	9 ⁹⁵
HH-1PL Up to 7" HT radio belt	Δmfv 19.95	9 ⁹⁵
HH-2PM To 6" HT radio belt/batt pocket Δmfv	21.95	10 ⁹⁵
HH-2PL To 8" HT radio belt/batt pocket Δmfv	21.95	10 ⁹⁵

US TOWER (UST)

FREE STANDING CRANK-UPS (TX not recommended)

TX-438 38' crank-up tower	T 1269.00	1142 ⁹⁵
TX-455 55' crank-up tower	T 1915.00	1399 ⁹⁵
TX-472 72' crank-up tower	T 3167.00	2832 ⁹⁵
TX-472MDP 72' crank-up w/motor drive	T 5044.00	3899 ⁹⁵
TX-489 89' crank-up tower	T 5475.00	4927 ⁹⁵
TX-489MDP 89' crank-up w/motor drive	T 8212.00	7390 ⁹⁵
TX-3106MDPLSP 106' crank-up/mot drive	T 12999.00	11699 ⁹⁵

FREE STANDING HEAVY DUTY CRANK-UP TOWERS

HDX-538 38' crank-up tower	T 1642.00	1477 ⁹⁵
HDX-555 55' crank-up tower	T 2874.00	2099 ⁹⁵
HDX-572 72' crank-up tower	T 4927.00	4434 ⁹⁵
HDX-572MDPL 72' crank-up w/motor drive	T 7528.00	6775 ⁹⁵
HDX-589MDPL 89' crank-up w/motor drive	T 9855.00	8869 ⁹⁵
HDX-689MDPL 89' HD crank-up w/motor	T 19039.00	17135 ⁹⁵
HDX-5106MDPL 106' HD crank-up w/motor	T 20719.00	18847 ⁹⁵

COMPACT TMM (Top mount rotor for full retraction)

TMM-433SS 33' crank-up tower	T 1355.00	1219 ⁹⁵
TMM-433HD 33' HD crank-up tower	T 1642.00	1477 ⁹⁵
TMM-541SS 41' crank-up tower	T 1779.00	1599 ⁹⁵

ACCESSORIES FOR CRANK-UP TOWERS

CX-2 Coax arms (2) for 2-section tower	\$ 55.95	
CX-3 Coax arms (3) for 3-section tower	77.95	
CX-4 Coax arms (4) for 4-section tower	122.00	
CX-5 Coax arms (5) for 5-section tower	167.00	150 ⁹⁵
CX-6 Coax arms (6) for 6-section tower	212.00	190 ⁹⁵
HDP Service platform	T 904.00	813 ⁹⁵
STS-4 Rotor accessory for TX/TMM towers	T 235.00	211 ⁹⁵
IV-16 Inverted vee arm for MA's	41.95	
M-5 2" OD 5' mast extension for MA's	40.95	
M-10 2" OD 10' mast	T 77.95	
M-15 2" OD 15' mast	T 115.95	
M-20 2" OD 20' mast	T 152.00	136 ⁹⁵
M-15R 2" OD 15' reinforced mast	T 174.00	156 ⁹⁵
M-20R 2" OD 20' reinforced mast	T 230.00	207 ⁹⁵
MD-75 Heavy duty 1 HP motor drive	T 1108.00	997 ⁹⁵
MDP-75* Pull-down drive; TX-472/HDX-555	T 1724.00	1551 ⁹⁵
MDPL-75* Pull-down drive; HDX-572	T 2340.00	2106 ⁹⁵
*Requires MCL-100 or RMC-1000 also		
MRF Mast raising fixture	298.00	268 ⁹⁵
MCL-100 Limit switch package	517.00	465 ⁹⁵
RMC-1000 Remote control w/limit switch	1108.00	997 ⁹⁵
RP-3 Rotor plate for 10" section	39.95	
RP-4 Rotor plate for 12 1/2" section	47.95	
RP-5 Rotor plate for 15" section	52.95	

US TOWER - continued

TRX-80 Raising fixture; TX-438/455/HDX-538/555 T	483.00	434 ⁹⁵
TRX-80HD Raising fixture; TX-472/489/HDX-572/589 T	635.00	571 ⁹⁵
TRX-100HD Raising fixture; HDX-689/5106 T	895.00	805 ⁹⁵
TB-2US Thurst bearing; 2" mast w/2 flange holes	110.95	

MA-SERIES TUBULAR TOWERS

MA-40 40' crank-up mast	T 1007.00	679 ⁹⁵
MA-550 55' crank-up mast	T 1704.00	1069 ⁹⁵
MA-550MDP 55' crank-up mast w/motor	T 3258.00	2932 ⁹⁵
MA-770 70' crank-up mast	T 2810.00	2529 ⁹⁵
MA-770MDP 70' crank-up mast w/motor	T 4445.00	3999 ⁹⁵
MA-850 85' crank-up mast	T 4344.00	3909 ⁹⁵
MA-850MDP 85' crank-up mast w/motor	T 5991.00	5391 ⁹⁵

MA-SERIES ACCESSORIES

CX-2M Coax arms (2) for MA-40	\$ 59.95	
CX-3M Coax arms (3) for MA-550	88.95	
CX-4M Coax arms (4) for MA-770	148.00	133 ⁹⁵
CX-5M Coax arms (5) for MA-850	178.00	160 ⁹⁵
MAB-40 Hinged base for MA-40	T 402.00	361 ⁹⁵
MAB-550 Hinged base for MA-550	T 480.00	432 ⁹⁵
MAB-770 Hinged base for MA-770	T 581.00	522 ⁹⁵
MAB-850 Hinged base for MA-850	T 704.00	633 ⁹⁵
MAF-40 Raising fixture for MA-40	T 246.00	221 ⁹⁵
MAF-550 Raising fixture for MA-550	T 340.00	306 ⁹⁵
MAF-770 Raising fixture for MA-770	T 346.00	311 ⁹⁵
MAF-850 Raising fixture for MA-850	T 458.00	412 ⁹⁵

MARB-40 Rotor base accessory for MA-40	T 615.00	553 ⁹⁵
MARB-550 Rotor base accessory for MA-550	T 727.00	654 ⁹⁵
MARB-770 Rotor base accessory for MA-770	T 861.00	714 ⁹⁵
MARB-850 Rotor base accessory for MA-850	T 1018.00	976 ⁹⁵

All US TOWER products are drop-shipped (shipped direct to you from the US TOWER factory). On these factory drop-shippments we prefer payment in full with order, however, we will accept your credit card with the understanding that we will process the charge when we order the merchandise from the factory. This means that you may be billed before you receive your drop-shipped merchandise. Shipment is FOB Visalia, California via truck. COD for freight charges only. Freight charges will be collected upon delivery by the carrier. Please allow sufficient time for delivery on these special order products. Most truck lines will not unload the tower for you, so please be sure to have enough manpower and/or equipment on hand when your tower is delivered by the carrier.

UNADILLA (See W2AU)

Unified Microsystems (UNM)

WXST Contest card for IBM PC & compatible	\$149.95	
CCC-4 4pin mic contest card cable semi-kit	44.95	
CCC-8 8pin mic contest card cable semi-kit	44.95	

Universal Towers (UNT)

4-30 4 sq ft wind load 30' alum tower	T \$348.00	313 ⁹⁵
9-30 9 sq ft wind load 30' alum tower	T 469.00	422 ⁹⁵
12-30 12 sq ft wind load 30' alum tower	T 616.00	554 ⁹⁵
21-30 21 sq ft wind load 30' alum tower	T 732.00	658 ⁹⁵
23-30 23 sq ft wind load 30' alum tower	T 969.00	872 ⁹⁵
35-30 35 sq ft wind load 30' alum tower	T 1092.00	982 ⁹⁵
4-40 4 sq ft wind load 40' alum tower	T 584.00	525 ⁹⁵
7-40 7 sq ft wind load 40' alum tower	T 734.00	660 ⁹⁵
9-40 9 sq ft wind load 40' alum tower	T 818.00	736 ⁹⁵
12-40 12 sq ft wind load 40' alum tower	T 969.00	872 ⁹⁵
14-40 14 sq ft wind load 40' alum tower	T 1083.00	974 ⁹⁵
21-40 21 sq ft wind load 40' alum tower	T 1203.00	1082 ⁹⁵
23-40 23 sq ft wind load 40' alum tower	T 1440.00	1296 ⁹⁵
4-50 4 sq ft wind load 50' alum tower	T 823.00	740 ⁹⁵
5-50 5 sq ft wind load 50' alum tower	T 936.00	842 ⁹⁵
7-50 7 sq ft wind load 50' alum tower	T 1053.00	947 ⁹⁵
9-50 9 sq ft wind load 50' alum tower	T 1171.00	1053 ⁹⁵
15-50 15 sq ft wind load 50' alum tower	T 1555.00	1399 ⁹⁵
16-50 16 sq ft wind load 50' alum tower	T 1678.00	1510 ⁹⁵
4-60 4 sq ft wind load 60' alum tower	T 1172.00	1054 ⁹⁵
6-60 6 sq ft wind load 60' alum tower	T 1437.00	1293 ⁹⁵
7-60 7 sq ft wind load 60' alum tower	T 1529.00	1376 ⁹⁵
9-60 9 sq ft wind load 60' alum tower	T 1640.00	1476 ⁹⁵
3-70 3 sq ft wind load 70' alum tower	T 1527.00	1374 ⁹⁵

PRICE LIST

UNIVERSAL - continued

	Reg Sale
4-70 4 sq ft wind load 70' alum tower	T 1877.00 1689 ⁹⁵
6-70 6 sq ft wind load 70' alum tower	T 1911.00 1719 ⁹⁵
7-70 7 sq ft wind load 70' alum tower	T 1996.00 1796 ⁹⁵
3-80 3 sq ft wind load 80' alum tower	T 2059.00 1853 ⁹⁵
4-80 4 sq ft wind load 80' alum tower	T 2384.00 2145 ⁹⁵
2-90 2 sq ft wind load 90' alum tower	T 2470.00 2223 ⁹⁵
B-14 Base for tower	65.95
B-18 Base for tower	65.95
B-22 Base for tower	110.28 99 ⁹⁵
B-26 Base for tower	141.78 127 ⁹⁵
Extra 14" stubs (between base & tower)	.set 12.95
Extra 18" stubs (between base & tower)	.set 24.95
Extra 22" stubs (between base & tower)	.set 40.95
Extra 26" stubs (between base & tower)	.set 40.95
Extra 30" stubs (between base & tower)	.set 60.95
RFM-11 Flat roof mt for guyed tower	44.95
RFM-14 Flat roof mt for guyed tower	44.95
RFM-18 Flat roof mt for guyed tower	69.95
RFM-22 Flat roof mt for guyed tower	103.95 93 ⁹⁵
RFM-26 Flat roof mt for guyed tower	138.66 124 ⁹⁵
R-11 Rotor mount	31.95
R-14 Rotor mount	47.95
R-18 Rotor mount	63.95

SEE LITERATURE FOR CONFIGURATION OF TOWERS

11 Top 11" top tower section	T 118.20 106 ⁹⁵
14 Top 14" top tower section	T 148.94 134 ⁹⁵
18 Top 18" top tower section	T 270.10 243 ⁹⁵
14 Taper 14" taper tower section	T 131.04 117 ⁹⁵
18 Taper 18" taper tower section	T 235.04 211 ⁹⁵
22 Taper 22" taper tower section	T 350.48 315 ⁹⁵
26 Taper 26" taper tower section	T 471.12 424 ⁹⁵
11 Straight 11" straight tower section	T 116.48 104 ⁹⁵
14 Straight 14" straight tower section	T 131.04 117 ⁹⁵
18 Straight 18" straight tower section	T 235.04 211 ⁹⁵
22 Straight 22" straight tower section	T 350.48 315 ⁹⁵
26 Straight 26" straight tower section	T 471.12 424 ⁹⁵
HD35-40 35 sq ft wind load 40' alum tower	T 1681.00 1512 ⁹⁵
HD21-50 21 sq ft wind load 50' alum tower	T 1793.00 1613 ⁹⁵
HD9-60 9 sq ft wind load 60' alum tower	T 1880.00 1692 ⁹⁵
HD16-60 16 sq ft wind load 60' alum tower	T 2265.00 2038 ⁹⁵
HD21-60 21 sq ft wind load 60' alum tower	T 2386.00 2147 ⁹⁵
HD8-70 8 sq ft wind load 70' alum tower	T 2115.00 1903 ⁹⁵
HD12-70 12 sq ft wind load 70' alum tower	T 2620.00 2358 ⁹⁵
HD17-70 17 sq ft wind load 70' alum tower	T 2858.00 2572 ⁹⁵
HD21-70 21 sq ft wind load 70' alum tower	T 2978.00 2680 ⁹⁵
HD8-80 8 sq ft wind load 80' alum tower	T 2707.00 2436 ⁹⁵
HD9-80 9 sq ft wind load 80' alum tower	T 2824.00 2541 ⁹⁵
HD11-80 11 sq ft wind load 80' alum tower	T 3208.00 2887 ⁹⁵
HD12-80 12 sq ft wind load 80' alum tower	T 3213.00 2891 ⁹⁵
HD16-80 16 sq ft wind load 80' alum tower	T 3449.00 3104 ⁹⁵
HD4-90 4 sq ft wind load 90' alum tower	T 2818.00 2536 ⁹⁵
HD8-90 8 sq ft wind load 90' alum tower	T 3325.00 2992 ⁹⁵
HD11-90 11 sq ft wind load 90' alum tower	T 3802.00 3421 ⁹⁵
HD4-100 4 sq ft wind load 100' alum tower	T 3775.00 3397 ⁹⁵
HD8-100 8 sq ft wind load 100' alum tower	T 4039.00 3635 ⁹⁵
B-30 Base for HD tower	221.50 199 ⁹⁵
RFM-30 Flat roof mt for guyed tower	193.98 174 ⁹⁵
1-5/8CS Flange bearing	94.95
2-3/16CS Flange bearing	120.64 108 ⁹⁵
Top Plate Flange plate welded to top section	23.95

SEE LITERATURE FOR CONFIGURATION OF TOWERS

30 Taper 30" taper tower section T 592.80 533⁹⁵

30 Straight 30" straight tower section T 592.80 533⁹⁵

1-1/4" OD x 5 ft aluminum mast T 22.95

1-1/4" OD x 10 ft aluminum mast T 31.95

1-1/2" OD x 10 ft aluminum mast T 39.95

2" OD x 8 ft aluminum mast T 47.95

2" OD x 16 ft aluminum mast T 94.95

ALL UNIVERSAL TOWERS products are drop-shipped (shipped direct to you from the UNIVERSAL TOWERS factory). On these factory-direct

UNIVERSAL - continued

shipsments we prefer payment in full with order, however, we will accept your credit card with the understanding that we will process the charge when we order the merchandise from the factory. This means that you may be billed before you receive your drop-shipped merchandise. Shipment is FOB Mt. Clemens, Michigan via truck, COD for freight charges only. Freight charges will be collected upon delivery by the carrier. Please allow sufficient time for delivery on these special order products. Most truck lines will not unload the tower for you, so please be sure to have enough manpower and/or equipment on hand when your tower is delivered by the carrier.

VALOR (See PRO AM)

VANCO (VCO)

SWR-1 SWR/field strength meter	\$ 36.14 19 ⁹⁵
SWR-3 Mini SWR meter	21.68 14 ⁹⁵

VAN GORDEN (VAN)

Hi-Q 1:1 balun	\$ 14.95
Hi-Q 4:1 balun	14.95
Antenna center insulator	6.95
Antenna end insulator	4.95
Dog bone type antenna insulator	each .95
NR-100 Nylon antenna guy rope	100 ft. 4.95
NR-1,000 Nylon ant guy rope	1,000 ft. 44.95
D-80 80m wire dipole antenna	32.95
SD-80 Short 80m dipole	36.95
D-40 40m wire dipole antenna	29.95
SD-40 Short 40m dipole	34.95
D-20 20m wire dipole antenna	28.95
D-15 15m wire dipole antenna	27.95
D-10 10m wire dipole antenna	26.95

All Bander Dipole 160-10m (w/tuner) 135' ant	29.95
Shorty All Bander 160-10m (w/tuner) 70' ant	44.95
GSRV Flat-top 5-band 102' ant/xmf/100' cable	50.95
GSRV-E Flat-top 5-band 102' ant/31' cable	28.95
GSRV JR Flat-top 4-band 52' ant/17' cable	24.95
GSRV-M Flat-top 5-band 204' ant/65' cable	50.95
N connector Type N connector for 9913	4.95
450 ohm 18ga solid ladderline	100 ft. 12.95
450 ohm 18ga solid ladderline	1,000 ft. 110.00 99 ⁹⁵
450 ohm 14ga solid ladderline	100 ft. 24.95
450 ohm 14ga solid ladderline	1,000 ft. 220.00 199 ⁹⁵

(WA1) WA1FFL Ladder-Loc 450 ohm ctr ins

RG-213 Non-contaminating	per ft. 12.95
RG-213/500 Non-contaminating	500 ft. Roll 49 ⁹⁵ 179 ⁹⁵
8X-3ST 3' RG-8X coax/silver teflon PL259s	8.95
8X-6ST 6' RG-8X coax/silver teflon PL259s	10.95
8X-12ST 12' RG-8X coax/silver teflon PL259s	11.95
8X-25ST 25' RG-8X coax/silver teflon PL259s	15.95
8X-50ST 50' RG-8X coax/silver teflon PL259s	24.95
8X-75ST 75' RG-8X coax/silver teflon PL259s	31.95
8X-100ST 100' RG-8X coax/silver teflon PL259s	37.95
213-3ST 3' RG-213 coax/silver teflon PL259s	11.95
213-6ST 6' RG-213 coax/silver teflon PL259s	14.95
213-12ST 12' RG-213 coax/silver teflon PL259s	18.95
213-25ST 25' RG-213 coax/silver teflon PL259s	25.95
213-50ST 50' RG-213 coax/silver teflon PL259s	38.95
213-75ST 75' RG-213 coax/silver teflon PL259s	54.95
213-100ST 100' RG-213 coax/silver teflon PL259s	72.95

VECTRONICS (VEC)

VC-300M 300w mobile antenna tuner	\$109.95 99 ⁹⁵
VC-300DLP 300w digital antenna tuner	159.95 149 ⁹⁵
VC-300D 300w digital antenna tuner	199.95 179 ⁹⁵
HFT-1500 1.5kw antenna tuner	459.95 399 ⁹⁵
AT-100 3-30 MHz active antenna/tuner	79.95
HF-600QSK 1kw HF amplifier w/QSK	1595.00 1279 ⁹⁵
HPF-1 High pass filter, 75 or 300 ohms	19.95
HPF-2 Deluxe high pass filter, 75 or 300 ohms	24.95
LP-30 1.5kw low pass filter	49.95
LP-2500 2.5kw low pass filter	79.95
CK-200 Deluxe keyer	79.95
DL-300M 300w dummy load	34.95
DL-650M 1.5kw dummy load	64.95
DL-2500 2.5kw dummy load	199.95 179 ⁹⁵

VECTRONICS - continued

PM-30HF 300/3kw HF wattmeter	79.95
PM-300V 30/300w VHF/UHF wattmeter	89.95
AC-12 12vdc 300ma adapter	12.95
PS-30F 25A power supply, 30A surge	129.95
PS-50F 35A power supply, 50A surge	199.95

VIBROPLEX (VIB)

090 Original Gold Bug	\$329.95 299 ⁹⁵
100 Original Presentation Super deluxe bug	289.95 269 ⁹⁵
105 Original Deluxe Bug	199.95
110 Original Standard Bug	159.95
113 VibroKeyer Gold Paddle	299.95 269 ⁹⁵
115 VibroKeyer Deluxe Paddle	179.95
120 VibroKeyer Standard Paddle	139.95
123 Iambic Gold Paddle	299.95 269 ⁹⁵
125 Iambic Presentation Paddle	259.95 239 ⁹⁵
130 Iambic Deluxe Paddle	179.95
135 Iambic Standard Paddle	139.95
140 Square Brass Racer Iambic paddle	99.95
150 Triangle Brass Racer Iambic paddle	139.95
153 Gold straight key	299.95 269 ⁹⁵
155 Standard straight key	139.95
160 Deluxe straight key	179.95
162 Gold Hand key/Iambic Paddle double	399.95 359 ⁹⁵
163 Gold Hand key/VibroKeyer Paddle double	399.95 359 ⁹⁵
165 Deluxe Hand key/Iambic Paddle double	349.90 319 ⁹⁵
170 Dlx Hand key/VibroKeyer Paddle double	349.90 319 ⁹⁵
175 Standard Hand key/Iambic Paddle double	299.95 269 ⁹⁵
180 Std Hand key/VibroKeyer Paddle double	299.95 269 ⁹⁵

WA1FFL (WA1)

Ladder-Loc 450 ohm ladderline center attach \$ 12.95

W2AU (Unadilla) (W2A)

W2AU 1:1 160-10m balun, lightning arrestor	\$ 24.95
W2AU Beam Balun, 1:1	24.95
W2AU 4:1 160-10m balun, lightning arrestor	24.95
W2DU-HF 1:1 1.8-30 MHz choke balun	26.95
W2DU-Beam Balun 40-10m 1:1 choke balun	26.95
W2DU-VHF 1:1 30-250 MHz choke balun	26.95
HA AN-sulator center insulator	9.95
HE END-sulator end insulators	each 4.95
KW-80CW Reyco 80m CW ant traps	each pair 48.95
KW-80F Reyco 75m phone ant traps	each pair 48.95
KW-40 Reyco 40m antenna traps	each pair 42.95
KW-30 Reyco 30m antenna traps	each pair 42.95
KW-20 Reyco 20m antenna traps	each pair 41.95
KW-17 Reyco 17m antenna traps	each pair 41.95
KW-15 Reyco 15m antenna traps	each pair 41.95
KW-12 Reyco 12m antenna traps	each pair 41.95
KW-10 Reyco 10m antenna traps	each pair 41.95
W2AU/W2VS 5-band ant kit (use tuner)	85.95

W5YI (W5Y)

GCSP Gordon West General code tapes/manual	\$ 19.90
GTSF Gordon West General theory tapes/manual	19.90
GUS General Upgrade Software	29.95
GWAM Gordon West Advanced study manual	11.95
GWAW Gordon West Adv written theory tapes	19.95
GW6E Gordon West 6 ea 10-28 wpm code tapes	29.95
GWEM Gordon West Extra study manual	11.95
GWET Gordon West Extra code tapes	9.95
GW6W Gordon West Extra written theory tapes	19.95
GW6G Gordon West 6 ea 5-16 wpm code tapes	29.95
GW6M Gordon West General study manual	11.95
GW6T Gordon West General code tapes	9.95
GW6W Gordon West General theory tapes	9.95
GW6N Gordon West 6 ea 0-7 wpm code tapes	29.95
GWNT Gordon West Novice Code Teacher	9.95
GWNN Gordon West Novice theory tapes	9.95
GW6T Gordon West No-Code Tech theory tapes	29.95
GW6M Gordon West No-Code Tech manual	12.95
GW6W Gordon West Tech theory tapes	9.95
HOS Ham operator software package	39.95
NCS No-code ham radio software package	29.95

W5YI - continued

NCPV Ham No-Code video seminar w/manual	31.95
TPG Tech/TechPlus/General manuals/soft/code	49.95

WAHL (WAH)

7740 Quick charge cordless soldering iron kit	\$ 46.95
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WALNUT CREEK (WAL)

Antennas Antennas CD-ROM	\$ 29.95
Garbo 250 MB DOS + 150 MB Mac	29.95 4 ⁹⁵
Giga Games 3,000 DOS/Windows games	39.95 9 ⁹⁵
Ham QRZ US & Canada calls plus programs	29.95
Hobbes 1,000's of OS/2 applications	29.95 4 ⁹⁵
Sintel 650 MB current DOS programs	29.95 6 ⁹⁵

WELLER (WEL)

7200PK 75w soldering gun kit	\$ 26.95
EC-1002-1 40w temp controlled solder stn	237.36 199 ⁹⁵
WP-25 25w professional soldering iron	32.95
W-60P 60w temp controlled soldering iron	61.95
WTCPT 60w temp controlled soldering stn	134.27 119 ⁹⁵
WSTA3 Pyroten portable LP soldering iron	105.90 99 ⁹⁵
WST2 Pyroten Jr. portable butane iron	85.95

YAESU (YAE)

FT-1000MP/DC HF Xcvr/EDSP/tuner	3399.00 2599 ⁹⁵
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\$100 instant coupon - FT-1000MP/DC thru 5/31/98

FP-1025A 20A switching ps, 25A surge	199.00 179 ⁹⁵
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FP-1030A 25A ps, 30A surge w/meters	269.00 249 ⁹⁵
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FT-1000MP 9-band Xcvr/EDSP/tuner/ps	3699.00 2799 ⁹⁵
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\$100 instant coupon - FT-1000MP thru 5/31/98

DVS-2 Digital voice recording module	238.00 219 ⁹⁵
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FM-1 Remote control keypad	88.95
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MD-100A8X Desk mic w/tone control	138.00 129 ⁹⁵
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MH-318B Extra hand microphone	39.95
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SP-8 External speaker w/filters	173.00 159 ⁹⁵
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LL-7 Phone patch unit for SP-8	153.00 139 ⁹⁵
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TCXO-4 TCXO unit	99.95
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TCXO-6 Deluxe TCXO unit, 0.5 ppm	190.00 174 ⁹⁵
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YF-110CN 250 Hz 3rd IF main Rcvr CW filt	157.00 144 ⁹⁵
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YF-110SN 2 KHz 3rd IF main Rcvr SSB filt	157.00 144 ⁹⁵
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YF-114CN 250 Hz 2nd IF main Rcvr CW filt	157.00 144 ⁹⁵
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YF-114SN 2 KHz 2nd IF main Rcvr SSB filt	157.00 144 ⁹⁵
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YF-115C 500 Hz CW Collins mech filter	173.00 159 ⁹⁵
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YH-77ST Open-air type stereo headphones	51.95
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FT-1000 Xcvr/ps/tuner/kyr/mic/XF-AB	4399.00 3199 ⁹⁵
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BPF-1 Dual bandpass filter; crossband rcv	196.00 179 ⁹⁵
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TCXO-1 Temp compensated xtal osc	190.00 174 ⁹⁵
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XF-C 2.4KHz SSB xtal filter (455KHz)	157.00 144 ⁹⁵
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YF-110SN/XF-D 2 KHz SSB xtal filter (455 KHz)	157.00 144 ⁹⁵
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YF-115C 500 Hz CW Collins mech filter	173.00 159 ⁹⁵
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DVS-1000 Dlx Xcvr w/BPF/TCXO/XF-ABCDE	5459.00 4399 ⁹⁵
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DVS-2 Digital voice recording module	238.00 219 ⁹⁵
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FIF-232C Interface for RS-232	95.95
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MD-100A8X* Desk mic w/tone control	138.00 129 ⁹⁵
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*Cable needed for FT-1000D contact service for info

SP-5 External spkr w/audio filter	157.00 144 ⁹⁵
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LL-5 Phone patch unit for SP-5	143.00 129 ⁹⁵
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XF-455MC 600Hz CW filter (455KHz); subrcvr	157.00 144 ⁹⁵
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YF-110SN/XF-F 250 Hz CW xtal filter (455 KHz)	157.00 144 ⁹⁵
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YH-77ST Open-air type stereo headphones	51.95
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FT-920 9-band Xcvr/AF-DSP/tuner/6m/kyr	2299.00 1799 ⁹⁵
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\$100 instant coupon - FT-920 thru 5/31/98

FP-1025A 20A switching ps, 25A surge	199.00 179 ⁹⁵
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FP-1030A 25A ps, 30A surge w/meters	269.00 249 ⁹⁵
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FM-1 FM unit	62.95
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MD-100A8X Desk mic w/tone control	138.00 129 ⁹⁵
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SP-8 External speaker w/filters	173.00 159 ⁹⁵
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LL-7 Phone patch unit for SP-8	153.00 139 ⁹⁵
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TCXO-7 TCXO unit	99.95
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YF-116A 6 KHz AM filter	127.00 119 ⁹⁵
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YF-116C 500 Hz CW filter	127.00 119 ⁹⁵
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YH-77ST Open-air type stereo headphones	51.95
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ATU-2 Internal auto ant tuner; FT-900	301.00 249 ⁹⁵
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SP-767P Speaker/patch for FT-767GX	143.00 129 ⁹⁵
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TCXO-2 Temp comp xtal osc; FT990	157.00 69 ⁹⁵
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YAESU - continued

XF-10.9M-202-01 2KHz SSB filt; FT990	Δmwf 127.00 119 ⁹⁵
XF-115S-01/YF115S01 2.75 Collins filter	Δm 189.00 99 ⁹⁵

FT-847 HF/6m/2m/430 Earth Station Xcvr/mic	2399.00 1849 ⁹⁵
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FP-1025A 20A switching ps, 25A surge	199.00 179 ⁹⁵
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FP-1030A 25A ps, 30A surge w/meters	269.00 249 ⁹⁵
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ATAS-100 HF/6/2/430 motorized mob ant	349.00 319 ⁹⁵
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FC-20 Automatic antenna tuner	299.00 269 ⁹⁵
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FVS-1A Voice synthesizer	43.95
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MD-100A8X Desk mic w/tone control	138.00 129 ⁹⁵
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MH-36D8 DTMF mobile microphone	60.95
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MMB-66 Mobile mounting bracket	39.95
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YF-115C 500 Hz CW Collins mech filter	173.00 159 ⁹⁵
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YF-115S-02 2.5 KHz SSB Collins mech filt	173.00 159 ⁹⁵
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FT-900/CAT Xcvr/rem/mic/tuner/Collinsfilt	Δmwf 1819.00 1369 ⁹⁵
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\$100 instant coupon - FT-900/CAT until gone!

XF-110C 500 Hz filter FREE with FT-900/CAT until gone!

YSK-900 remote kit FREE with FT-900/CAT until gone!

FP-1025A 20A switching ps, 25A surge	199.00 179 ⁹⁵
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FP-1030A 25A ps, 30A surge w/meters	269.00 249 ⁹⁵
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CT-26 Mic adapter cable; modular to 8-pin	22.95
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DVS-2 Digital voice recording module	238.00 219 ⁹⁵
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FC-800 External long wire auto tuner	525.00 439 ⁹⁵
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FIF-232C Interface for RS-232	95.95
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MD-100A8X Desk mic w/tone control	138.00 129 ⁹⁵
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CT-20 Mic cable for use with MD-1C8	22.95
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MH-31ABJ Extra hand microphone	39.95
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MMB-20 Mobile mount	34.95
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SP-6 External speaker w/filter	157.00 144 ⁹⁵
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LL-5 Phone patch unit for SP-6	143.00 129 ⁹⁵
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SP-7 Mobile speaker	40.95
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TCXO-3 TCXO unit	79.95
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XF-110C 455 KHz 500 Hz CW filter	157.00 144 ⁹⁵
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XF-110CN 455 KHz 250 Hz CW filter	157.00 144 ⁹⁵
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XF-110S 455 KHz 2.6 KHz SSB filter	157.00 144 ⁹⁵
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YF-101 2nd IF 2.6 KHz SSB filter	Δwf 179.00 129 ⁹⁵
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YF-007FG Mobile fig 3-30 MHz whip	Δmf 157.00 79 ⁹⁵
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YH-77ST Open-air type stereo headphones	51.95
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YSK-900 20' remote mtg kit w/tkn mtg bkt	68.95
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MMB-62 Remote control panel bracket	39.95
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FRB-757 External relay box	31.95
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FT-600 Commercial grade HF Xcvr	Δwv 1105.00 799 ⁹⁵
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FT-840 Xcvr/SW Rcvr	1099.00 899 ⁹⁵
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\$100 instant coupon - FT-840 thru 5/31/98

FP-1025A 20A switching ps, 25A surge	199.00 179 ⁹⁵
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FP-1030A 25A ps, 30A surge w/meters	269.00 249 ⁹⁵
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FC-10 External coax fed auto tuner	429.00 379 ⁹⁵
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FC-800 External long wire auto tuner	525.00 439 ⁹⁵
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FIF-232C Interface for RS-232	95.95
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FM-747 FM unit	62.95
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MD-100A8X* Desk mic w/tone control	138.00 129 ⁹⁵
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*Cable needed for FT-840 contact service for info

MMB-20 Mobile mount	34.95
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SP-6 External speaker w/filter	157.00 144 ⁹⁵
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SP-7 Mobile speaker	40.95
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TCXO-4 TCXO unit	99.95
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YF-112A 6 KHz AM filter	127.00 119 ⁹⁵
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YF-112C 500 Hz CW filter	127.00 119 ⁹⁵
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YH-77ST Open-air type stereo headphones	51.95
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CT-11 Cable - FL-7000 to FT-890/900	Δmf 19.95
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E-767 Cable - FL-7000/767/990/1000/MP	Δmf 16.95
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FAS-1-4R Remote antenna selector	Δmwv 143.00 129 ⁹⁵
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FP-700 Power supply	286.00 209 ⁹⁵
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FC-757AT Auto ant tuner w/memory	Δwv 585.00 469 ⁹⁵
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Quadra System VL1000/VP1000 amp/tuner	5990.00 4799 ⁹⁵
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MR-1000 Quadra system mounting rack	299.95
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FRG-100B 1-130 MHz shortwave receiver	739.00 619 ⁹⁵
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FM Unit-100 FM unit	47.95
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TCXO-4 TCXO unit	99.95
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YF-110CN/XF-F 250 Hz CW xtal filter	157.00 144 ⁹⁵
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YF-115C 500 Hz CW Collins mech filter	173.00 159 ⁹⁵
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XF-455MC 600 Hz CW filter; FT-650	Δmv 169.00 69 ⁹⁵
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YA-30 1.8-30 MHz broadband dipole ant	269.00 239 ⁹⁵
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YH-77ST Open-air type stereo headphones	51.95
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YAESU - continued

YS-60 1.8-60 MHz 2kw PEP wattmeter	139.00 129 ⁹⁵
YS-500 140-520 MHz 200w PEP wattmeter	114.00 109 ⁹⁵

FT-736R 25w 2m/430 full dplx Xcvr/ps/mic	2449.00 1899 ⁹⁵
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AD-3 100w 2m/440 duplexer	52.95
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E-736 DC cable	16.95
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FEX-736-50 6m module	317.00 279 ⁹⁵
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FEX-736-220 220 MHz module	349.00 309 ⁹⁵
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FEX-736-1.2 1.2 GHz module	619.00 539 ⁹⁵
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FIF-232C Interface for RS-232	95.95
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FTS-8 Encoder/decoder	62.95
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FVS-1A Voice synthesizer	43.95
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Keyer-B Electronic keyer unit	26.95
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MH-188 Extra hand microphone	30.95
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SP-767 Speaker w/audio filters	110.00 99 ⁹⁵
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TV-736 1.2 GHz ATV converter	205.00 189 ⁹⁵
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FT-290R Mk II 25w 2m FM/SSB Xcvr/TTP	749.00 629 ⁹⁵
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FT-970R Mk II 25w 430-450 FM/SSB/TTP	Δf 869.00 719 ⁹⁵
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CSC-19 Soft case	16.95
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FBA-8 Holder for 9 C-cell nicads	39.95
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PRICE LIST

YAESU - continued

SP-3 Small mobile speaker	23.95	
SP-4 Mobile speaker	31.95	
VXR-5000VADC/Vertex 25w 2m FM repeater	1635.00	1199 ⁹⁵
VXR-5000CDC/Vertex 35w 440 FM repeater	1635.00	1199 ⁹⁵
VXR-5000U/TC/Vertex 25w 440 FM rpt w/ps	2499.00	1399 ⁹⁵
Repeater require service dept. set-up; \$72 minimum		
COM ID-8 Auto Morse code ID'er	69.95	
MR-KIT1 19" rack mtg kit; VXR repeater	218.00	199 ⁹⁵
VXD-40UB/Vertex 440 duplexer (untuned)	222.00	199 ⁹⁵
Tuning charge; VXD-40UB (specify freqs)	50.95	
VX VPL-1 PC programming cable	65.95	

Accessories for FT-208R/708R

FNB-2A Nicad battery pack	Δmwv	\$ 45.95
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Accessories for 09-series/03-series

FNB-4A 500ma 12v battery	Δmwv	\$ 62.95
FTS-6 Encoder/decoder; 09-series	Δmwfv	35.00 9 ⁹⁵
MMB-21 Mobile bracket; also for 727R	Δm	16.00 4 ⁹⁵

Accessories for FT-26/415/416/530

CA-8 2 chg sleeves; NC-50/416/530	Δmwfv	\$ 27.95 24 ⁹⁵
CLIP-3 Belt clip	Δwfv	7.95
CSC-50 Vinyl case; 415/416/FNB25	Δm	16.00 2 ⁹⁵
CSC-53 Vinyl case; 26/76/FNB-25	Δfv	19.00 4 ⁹⁵
CSC-56 Vinyl case; 530 w/FNB-25	Δmwv	19.95 14 ⁹⁵
FBA-12 AA cell holder	Δmwfv	19.95
FNB-25 600ma 7.2v nicad battery	Δmwfv	39.95
FNB-25G 600ma 7.2v gray nicad	Δmwfv	39.00 19 ⁹⁵
FNB-26 1000ma 7.2v nicad battery	Δmw	55.95 49 ⁹⁵
FNB-27 600ma 12v nicad batt (5w)	Δmwfv	62.95
MMB-54 Mobile mounting bracket	Δm	23.00 9 ⁹⁵
FT-23R-17 2.5w 2m FM HT/FNB-17/cgr Δmw	240.00	179 ⁹⁵
FT-23R-12 5w 2m FM HT/FNB-12S/cgr	257.00	219 ⁹⁵
FT-33R 5w 2.5w FM HT/batt/cgr	369.00	299 ⁹⁵
FT-411E 2.5w 2m FM HT/FNB-17/cgr/TPP	305.00	259 ⁹⁵
FT-911 1w 1.2 GHz FM HT/batt/cgr/TPP	569.00	469 ⁹⁵

Accs for FT-23R/33R/73R/411E/811/470/911

CA-7 2 charging sleeves; NC-50/411E/470	\$ 27.95	
CLIP-1 Belt clip	7.95	
CSC-28 Soft case; 23R/33R/73R w/FNB-12S	16.95	
CSC-35 Soft case; FT-411E w/FNB-17	Δmfv	16.00 9 ⁹⁵
CSC-37 Soft case; FT-411E w/FNB-12S/14	16.95	
CSC-48 Soft case; 23R/33R/73R w/FNB-17	16.95	
FBA-17 AA battery holder	19.95	
FNB-12S 600ma 12v (5w) battery	55.95	
FNB-14 1000ma 7.2v battery	55.95	
FNB-17 600ma 7.2v battery	34.95	
FTS-12 Encoder/decoder for FT-23R/33R/73R	60.95	
FTS-17A Tone squelch/pager; FT-411E	47.95	
FTT-4 DTMF (TTP) unit for FT-23/33R	48.95	
LCC-25 Leather case for FT-411E	Δv	51.95 36 ⁹⁵
MH-30C2B Speaker/microphone	45.95	
MH-32A2B Compact label speaker/mic	30.95	
MH-35A2B Spkr mic/clip/earphone jack	39.95	
MMB-46 Mobile hanger for FT-470	Δmwfv	25.00 9 ⁹⁵
NC-18B/NC-65B Wall charger for FNB-12S	14.95	
NC-28B Extra wall charger for FNB-17	14.95	
NC-34B Wall charger for FNB-14	14.95	
PA-6 Mobile DC adapter/cgr; FNB-14/17	31.95	
YH-2 Lightweight VOX headset w/mic	30.95	

FT-10/40B-A06 2.5w 2m HT/6 key/30ch	Δf	309.00 219 ⁹⁵
FT-10/41B-A06 5w 2m HT/6 keypad/30 ch	Δf	319.00 259 ⁹⁵
FT-10/40B-A16 2.5w 2m HT/16key/30ch Δmw	339.00	239 ⁹⁵
FT-10/41B-A16 5w 2m HT/16 keypad/30 ch	369.00	279 ⁹⁵
FT-10/40B-A16D 2.5w 2m HT/16key/99ch Δm	349.00	259 ⁹⁵
FT-10/41B-A16D 5w 2m HT/16 keypad/99ch	379.00	299 ⁹⁵
FT-10/40B-A16S 2.5w 2m/16key/99ch/DVR Δmv	389.00	279 ⁹⁵
FT-10/41B-A16S 5w 2m/16 key/99ch/DVRS	399.00	319 ⁹⁵
FT-40/41B-A06 5w 440 HT/6 keypad/30 ch	349.00	289 ⁹⁵
FT-40/41B-A16 5w 440 HT/16 key/30 ch	379.00	309 ⁹⁵
FT-40/40B-A16D 2w 440/16 key/99 ch	Δm	399.00 284 ⁹⁵
FT-40/41B-A16D 5w 440 HT/16 key/99 ch	409.00	329 ⁹⁵
FT-40/40B-A16S 2w 440/16key/99ch/DVRS	Δv	419.00 299 ⁹⁵
FT-40/41B-A16S 5w 440/16key/99ch/DVRS	Δv	429.00 339 ⁹⁵

YAESU - continued

FT-50RD/41B 5w 2m/440 HT/FNB41/FTT-12	449.00	349 ⁹⁵
\$20 instant coupon - FT-50RD/41B thru 5/31/98		
ADMS-1D Windows programming software	39.95	
CA-15 Charging stand; FT-10/40/50	27.95	
NC-60B Wall charger; FNB-40/41/CA-15	14.95	
CLIP-10 Spring loaded belt clip	7.95	
CN-2 BNC to SMA adapter; FT-10/40	8.95	
CN-3 BNC to SMA adapter; FT-50R	8.95	
CSC-68 Soft case; FNB-41/FBA-15	16.95	
CSC-69 Soft case; FNB-40	16.95	
CSC-V10 Cordura soft case; FT-10/40/50	27.95	
CT-27 Cloning cable	10.95	
CT-30 Microphone Y adapter	10.95	
EDC-5B DC adapter w/noise filter	26.95	
EDC-6 DC adapter; plug & wire only	7.95	
FBA-15 AA battery holder	19.95	
FEP-10 Earphone	9.95	
FNB-40 650ma 6v battery	48.95	
FNB-41 600ma 9.6v (5w) battery	58.95	
FNB-42 1100ma 9.6v (5w) battery	62.95	
FNB-V47 1100ma 7.2v battery w/belt clip	55.95	
PA-17 Battery cable extender	57.95	
FNB-49 600ma 6v battery	Δmwfv	38.00 19 ⁹⁵
FTT-10/A06 6-key keypad/encoder/30 ch	25.95	
FTT-10/A16 16-key keypad/encoder/30 ch	34.95	
FTT-10/A16D 16-key pad/enc/dec/99ch	62.95	
FTT-10/A16S 16-key pad/enc/dec/99ch/DVRS	81.95	
FTT-12 16-key keypad/dec/DVRS; FT-50R	62.95	
LCC-10C Leather case/belt clip; 50/FNB41/V47	31.95	
LCC-10S Leather case/swivel; 50/FNB41/V47	31.95	
LCC-11S Leather case/swivel; FT50/FNB40	31.95	
MH-30C2B Speaker/mic; use CT-30 also	45.95	
MH-34B4B Speaker/mic	30.95	
MH-37A4B Earpiece/microphone	30.95	
NC-50 1-hour dual slot charger	92.95	
CA-14 2 charging sleeves; NC-50	26.95	
RH-1 Black rubber case protector	7.95	
RH-1R Orange rubber case protector	7.95	
VC-23 VOX headset	62.95	
YHA-54 Replacement 2m/440 BNC duck	16.95	
FT-11R 1.5w 2m HT/FNB-31/cgr/TPP	Δmwfv	389.00 249 ⁹⁵
FT-11R/HP 5w 2m FM HT/FNB38/cgr/TPP Δmwfv	399.00	269 ⁹⁵
FT-51R 2w 2m 440 HT/FNB31/cgr/TPP	Δwfv	619.00 419 ⁹⁵
MH-29A2B spkr/mic FREE with FT-51R! Limited Time!		
FT-51R/HP 5w 2m/440 HT/FNB-38/cgr/TPP	Δf	639.00 469 ⁹⁵
MH-29A2B spkr/mic FREE with FT-51R/HP! Limited Time!		
51R Clone/CT-35 Clone cable; FT-11/41/51R	9.95	
ADMS-1D Windows programming software	39.95	
CD-2 Mobile rapid charger; FT-11/41/51R	103.95	
CSC-61 Case; 11R/41R/FNB-33/38/FBA-14	16.95	
CSC-62 Soft case for FT-11R/41R/FNB-31	16.95	
CSC-66 Soft case; FT-51R/FNB-33/38/FBA-14	19.95	
CSC-67 Soft case for FT-51R/FNB-31	19.95	
EDC-12 DC adapter; FT-11R/41/51R	38.95	
FBA-14 AA battery holder	19.95	
FNB-31 600ma 4.8v battery	47.95	
FNB-33 1200ma 4.8v battery	62.95	
FNB-38 600ma 9.6v (5w) battery	75.95	
FTS-26 CTCSS decoder	47.95	
MH-29A2B LCD display spkr/mic; 51R	106.95	
MH-30C2B Speaker/microphone	45.95	
MH-32A2B Compact label speaker/mic	30.95	
MH-35A2B Spkr mic/clip/earphone jack	39.95	
MH-37B2B Earpiece/microphone	30.95	
NC-34B Wall charger for FNB-33	14.95	
NC-38B Wall charger for FNB-38	14.95	
NC-50 1-hour dual slot charger	92.95	
CA-10 2 charging sleeves; NC-50/11/41/51	14.95	
NC-55B Wall charger for FNB-31	14.95	
VC-22 Headset w/VOX	62.95	
YHA-54 Replacement 2m/440 BNC duck	16.95	
VX-1R 500mw 2m/440 submini HT/lith ion	349.00	249 ⁹⁵
ADMS-1D Windows programming software	39.95	
CN-3 BNC to SMA adapter	8.95	

YAESU - continued

CSC-71 Soft case for VX-1R	19.95	
CT-44 2-pin spkr/mic adapter	12.95	
EDC-15 DC adapter	38.95	
FBA-20 Battery holder	22.95	
FEP-10 Earphone	9.95	
FNB-52LI Extra lithium ion battery	36.95	
MH-34B4B Speaker/mic	30.95	
MH-37A4B Earpiece/microphone	30.95	
NC-66B 2 hour wall charger	18.95	
VC-25 VOX headset	62.95	

ANTENNA ROTORS

G-450XL 10 sq ft antenna rotor	\$269.00	239 ⁹⁵
G-500A 12 sq ft elevation rotor/8-wire	319.00	279 ⁹⁵
G-800S Med/hvy duty 450 degree 17sq ft/5-wire	399.00	339 ⁹⁵
G-800SDX Med/hvy duty 17sq ft/presets/5-wire	499.00	429 ⁹⁵
G-1000SDX HD 450 degree 23sq ft/presets/5-wire	599.00	519 ⁹⁵
G-2800SDX HD 450 degree 34sq ft/presets/8-wire	1329.00	1139 ⁹⁵
G-5400B Light/med 11sq ft az/el/2x8-wire	619.00	539 ⁹⁵
Dep Kit Separation kit for G-5400B	23.95	
GA-2500 Tower absorber joint;450XL/800S/SDX	79.95	
GA-3000 Tower absorber joint;1000SDX/2800SDX	119.95	
GC-03S Mast clamp; 450/800/1000/5400B	31.95	
GC-04B Mast clamp; G-2700/2800SDX	47.95	
GS-050 50mm thrust bearing; mast 1 1/2"	31.95	
GS-065 65mm thrust bearing; mast 1 1/2"	47.95	
GS-23 Interface; G-800/1000/2700/2800SDX	356.00	299 ⁹⁵
GS-232 Interface for G-5400B	562.00	469 ⁹⁵

See BELDEN for rotor cable

ZENITH (ZEN)

A-8477 75 ohm high-pass filter	Δmwfv	9 ⁹⁵
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zm Xpressions (ZMX)

What is your TNC doing? Book	\$ 15.00	
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CLOSE-OUTS

ADI AT-400 2.5w 440 HT/batt/cgr/TPP	wf	159 ⁹⁵
ADI AT-600 2.5w 2m/440 HT/batt/TPP	Δmwfv	249 ⁹⁵
AEA DSP-1522 1 port multimode controller	v	399 ⁹⁵
AEA IDR-96 5w 441.05 data Xcv/9600	m	379 ⁹⁵
AEA OP-80 OpLink Fast CW/stereo hdset	m	99 ⁹⁵
AEA PCB-88 IBM plug-in packet adapt	mf	99 ⁹⁵
ALI DJ-191T 2w 2m FM HT w/coupon	Δmv	149 ⁹⁵
ALI DJ-480T 440 FM HT w/coupon	m	179 ⁹⁵
ALI DJ-G1T 2w 2m FM HT/cgr/TPP	Δmwfv	149 ⁹⁵
ALI DR-150T 5w 2m FM/TPP mic/9600	Δv	249 ⁹⁵
ALI EDC-52 Quick charger	Δmwfv	99 ⁹⁵
AZD AZ-61 5w 6m FM HT/batt/cgr/TPP	m	299 ⁹⁵
AZD AZ-21A 5w 2m FM HT/batt/cgr/TPP	m	199 ⁹⁵
AZD PCS-7300H 35w 440 FM/TPP mic	m	249 ⁹⁵
AZD PCS-7800H 50w 10m FM/TPP mic	wfv	299 ⁹⁵
AZD PCS-9600D 35w 440 FM/9600 baud	Δv	599 ⁹⁵
B&K 541 Component comparator	m	249 ⁹⁵
B&K 1646 0-16V, 0-10A power supply	m	279 ⁹⁵
BEN ST-3 Sgl lever key paddle, gold plate	mf	199 ⁹⁵
BEN ST-4 Sgl lever/bk base/gold comp	wf	99 ⁹⁵
CES 410 Personal Patch interconnect	Δv	129 ⁹⁵
CMT CA-F226F 136-175 6db 8" 10"	Δmv	109 ⁹⁵
CMT CMR-241 2m/440 6.5' rpt ant	wfv	129 ⁹⁵
CSY CS-700 Simplex interconnect	Δmwfv	249 ⁹⁵
CUS 10-4CD 10m, 4 el, 16' boom, 10 db	wfv	229 ⁹⁵
CUS 15-3CD 15m, 3 el, 14' boom, 8 db	Δmwfv	169 ⁹⁵
CUS 15-4CD 15m, 4 el, 20' boom, 10 db	wfv	289 ⁹⁵
CUS 20-3CD 20m, 3 el, 20' boom, 8 db	Δmwfv	349 ⁹⁵
CUS 20-4CD 20m, 4 el, 32' boom, 10 db	wf	469 ⁹⁵
CUS 40-2CD 40m, 2 el, 23' boom, 5.5 db	Δmwfv	449 ⁹⁵
CUS AP-8A 80-10m rugged vert	Δmwv	199 ⁹⁵
DAI DP-820 140-525 dig SWR/power	w	249 ⁹⁵
DIG D-612 1.2 GHz 9-dig ctr; 1 PPM	w	199 ⁹⁵
DR R-8A Shortwave receiver	f	999 ⁹⁵
GRU GPS-38 GPS receiver	Δmv	149 ⁹⁵
GAR Yacht Boy 305 AM/FM/SW/LW Rcvr	v	119 ⁹⁵
HUS G7-150-3 7db 161-168 base ant	Δmwfv	99 ⁹⁵
HUS G7-150-4 7db 167-174 base ant	Δmwfv	99 ⁹⁵

CLOSE-OUTS - continued

HUS G6-450-1	6db 450-458 base ant	.....mf	99 ⁹⁵
HUS G6-450-4	6db 470-478 base ant	.....mwf	99 ⁹⁵
HYG 215S	7030SAT 435 MHz 30 el beam	.....v	149 ⁹⁵
HYG 216S	216SAT 2m 16el 145.9MHz bm	.....fv	159 ⁹⁵
HYG 231S	70-31DX 430 31 el, 24' bm	.....mwf	149 ⁹⁵
HYG 232S	215DX 2m 15 el, 28' boom	.....mwf	139 ⁹⁵
HYG 331S	V-42R 2m/440 N base ant	.....mwf	139 ⁹⁵
HYG 381S	19PD 80-10 233' 1-band dip	.....mwf	199 ⁹⁵
HYG 383S	58DQs 2-band 94' trap	.....wvf	159 ⁹⁵
HYG 1009AA	LP-1009AA 13-30 12el LP	.....mwf	199 ⁹⁵
ICO BC-35	Drop-in rapid charger	.....mwf	119 ⁹⁵
ICO BC-72	Rapid desk charger	.....mv	149 ⁹⁵
ICO BP-7	425ma 13.5v 5w battery	.....mwf	99 ⁹⁵
ICO BP-82	7.2v 300ma battery	.....mwf	39 ⁹⁵
ICO BP-103	600ma 12v batt; Delta-1A	.....fv	99 ⁹⁵
ICO BP-153	600ma 12v batt; IC-T21A	.....wvf	99 ⁹⁵
ICO BP-160	700ma 7.2v battery	.....mwf	29 ⁹⁵
ICO CR-64	High stab osc xtal; 728	.....mwf	139 ⁹⁵
ICO FL-32A	500 Hz CW filter; R-71A	.....mwf	99 ⁹⁵
ICO FL-63A	250 Hz CW filter; R-71A	.....mwf	99 ⁹⁵
ICO HM-90A	Wireless microphone	.....mwf	139 ⁹⁵
ICO IC-141A	440 FM HT/batt/cgr/TTP	.....w	239 ⁹⁵
ICO IC-142A	440 FM HT/batt/cgr/TTP	.....mw	239 ⁹⁵
ICO IC-46XAT	440 FM HT/batt/cgr/TTP	.....mwf	259 ⁹⁵
ICO IC-281H	50w 2m FM/9600 baud	.....wvf	299 ⁹⁵
ICO IC-481H	35w 440 FM/TT/9600	.....mwf	269 ⁹⁵
ICO IC-2000H	50w 2m FM w/coupon	.....mwf	224 ⁹⁵
ICO IC-2700H LTD	50w 2m/35w 440HM90A	.....mwf	499 ⁹⁵
ICO R-1-15	1M-1.3G AM/FM hand/cell blkd	.....mfv	369 ⁹⁵
ICO UI-7	AM/FM module for IC-728	.....v	109 ⁹⁵
ICO UT-70	Tone encoder/decoder; D1A	.....mwf	99 ⁹⁵
ICO UT-76	Tone squelch unit; D100H	.....mwf	99 ⁹⁵
JPS NF-60	Auto DSP audio spec notch filt	.....mf	119 ⁹⁵
JPS NIR-10	Dix noise/notch DSP BP filter	.....mwf	199 ⁹⁵
JPS NRF-7	Noise reducer and filter unit	.....v	169 ⁹⁵
KAN Data Engine	TNC w/no modems	.....mwf	249 ⁹⁵
KAN Data Engine w/DE	1200 modem	.....mwf	299 ⁹⁵
KAN DE-19K2/9K6	19.2/9600 baud modem wv	.....fv	99 ⁹⁵
KEN AT-450	80-10m int tuner; 450/690	.....mwf	229 ⁹⁵
KEN AT-850	80-10m int tuner; 850S	.....mf	229 ⁹⁵
KEN BC-15A	Rapid cgr; PB-13/14/17/18	.....mwf	29 ⁹⁵
KEN DRU-3	Digital recording unit	.....mwf	119 ⁹⁵
KEN MA-5	5band 200w PEP HF mob ant	.....m	139 ⁹⁵
KEN PB-32	600ma 6v battery	.....mwf	19 ⁹⁵
KEN TH-42AT	2.5w 440HT/batt/cgr/TTP	.....mwf	299 ⁹⁵
KEN TH-48A	2w 440 FM HT/batt/cgr/TTP	.....mf	229 ⁹⁵
KEN TH-79A(D)	2.7w 2m/440 HT w/coupon	.....mwf	289 ⁹⁵
KEN TH-232A	1.5w 2m HT/batt/cgr/TTP	.....mwf	139 ⁹⁵
KEN TS-570D	HF Xcvt/Rcvr w/coupon	.....mwf	1199 ⁹⁵
KEN TS-570S	HF Xcvt/6m w/coupon	.....mwf	1549 ⁹⁵

Reg Sale

CLOSE-OUTS - continued

KEN TS-790A	45w 2m/40w 440 w/coupon	.....mwf	1399 ⁹⁵
KEN YG-455C-1	500 Hz CW filt; 450/690	.....mwf	149 ⁹⁵
KEN YK-88S-1	2.4 KHz SSB filt; 450/690	.....mwf	119 ⁹⁵
KEN YK-88C	500 Hz CW filter; R-5000	.....mw	129 ⁹⁵
KEN YK-88CN	270Hz CW filter; R-5000	.....mwf	99 ⁹⁵
KEN YK-88SN	1.8 KHz SSB filt; R-5000	.....mw	119 ⁹⁵
KLM 40-10V	40/20/15/10m 26.5' vertical	.....m	259 ⁹⁵
KLM 432-20LBX	432 Rcvr, 12.33'bm, 15db	.....mf	109 ⁹⁵
MAG GPS-4000	GPS Rcvr w/carrying case	.....v	209 ⁹⁵
MAG Meridian XL	GPS/plot/detach ant	.....mwf	299 ⁹⁵
MFJ 346	600 MHz LCD frequency counter	.....mf	119 ⁹⁵
MFJ 1292	Video digitizer for IBM	.....mwf	119 ⁹⁵
MFJ 1782	Super Hi-Q 10-30 loop/basic cti	.....mwf	169 ⁹⁵
MFJ 1793	80/40/20m vertical antenna	.....mwf	129 ⁹⁵
MFJ 9017	5w 17m CW Xcvt	.....wvf	129 ⁹⁵
MFJ 9115B	9015 Xcvt/tuner/ps/ant	.....mfv	259 ⁹⁵
MFJ 9117B	9017 Xcvt/tuner/ps/ant	.....mwf	219 ⁹⁵
MFJ 9130B	9030 Xcvt/tuner/ps/ant	.....mwf	259 ⁹⁵
MIR A-1015R	6m FM 2/80w rpt amp	.....m	499 ⁹⁵
MIR B-236	2m FM/SSB 2/30w amp/preamp	.....f	119 ⁹⁵
MIR C-211G	220 FM/SSB 2/110w amp/p	.....mwf	249 ⁹⁵
MIR C-5012G	220 FM/SSB 50/120w amp/p	.....mw	239 ⁹⁵
MIR C-5022G	220 FM/SSB 50/220w amp/p	.....mwf	469 ⁹⁵
NYE MBV-B	As MBV-A, without meters	.....mwf	649 ⁹⁵
OPT R-10	30-2000MHz FM Interceptor	.....f	249 ⁹⁵
OPT SSB-220A	SSB/gen purp 3GHz ctr	.....wf	269 ⁹⁵
PAL PK-203	Brass Jones single lever key	.....f	199 ⁹⁵
RFC 2-23	2m FM/SSB 2/30w amp/pre	.....mwf	79 ⁹⁵
RFC 2/70	2m/440FM 3/30/5/20w HT ampmwf	189 ⁹⁵
RFC 2/70G	2m/440 3/30/5/20w HT amp/prefv	249 ⁹⁵
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RFC UHF-50	440 3/50w FM HT N ampmfv	219 ⁹⁵
RFC VHF1-60	2m 1/60w FM HT ampmwf	179 ⁹⁵
RFL DF-7000	7kw PEP low pass filter	.....m	99 ⁹⁵
RFL DF-10000	10kw PEP low pass filter	.....m	119 ⁹⁵
RFL HL-62V	2m .5-10/6-60w amp/pre	.....mfv	99 ⁹⁵
RFL HL-36U	440 .5-12/30w amplifier	.....wvf	159 ⁹⁵
SGC 55-04	SG-103 1.8-30MHz 150w dip	.....m	189 ⁹⁵
SGC 55-45	QMS Quick universal mt sys	.....m	369 ⁹⁵
SGC 55-46	QMS-1 Quick mt sys w/SG230	.....m	769 ⁹⁵
STA C-568A	2m/440/1.2 HT/batt/cgr/TTP	.....mwf	539 ⁹⁵
STR 1350	1-1300 MHz freq counter	.....mwf	119 ⁹⁵
TRI BC INTERNET-325	Stdby UPS 325VAmwf	99 ⁹⁵
TRI BC INTERNET-450	Stdby UPS 450VAmwf	119 ⁹⁵
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TRI BC PERS-420	Standby UPS 420VAmwf	109 ⁹⁵
VEC HF-600QSK	1kw HF amplifier w/QSKm	1279 ⁹⁵
YAE ATU-2	Internal ant tuner; FT-900m	249 ⁹⁵
YAE FAS-1-4R	Remote ant selectormwf	129 ⁹⁵

Reg Sale

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YAE FC-757AT	Auto ant tuner w/memoryw	469 ⁹⁵
YAE FNB-25G	600ma 7.2v gray nicadmwf	19 ⁹⁵
YAE FNB-49	600ma 6v batterymwf	19 ⁹⁵
YAE FP-700	Power supplyf	209 ⁹⁵
YAE FRC-4	DTMF pager unit; 5200/6200mwf	14 ⁹⁵
YAE FRC-6	DTMF pager unit; 2500/7400mwf	19 ⁹⁵
YAE FT-10/40B-A06	2.5w 2mHT/6key/30chf	219 ⁹⁵
YAE FT-10/40B-A16	2.5w 2mHT/16key/30chmw	239 ⁹⁵
YAE FT-10/40B-A16D	2.5w 2mHT/16key/99chm	259 ⁹⁵
YAE FT-10/40B-A16S	2.5w 2m/16ky/99ch/DVRmv	279 ⁹⁵
YAE FT-11R	1.5w 2m HT/FNB31/cgr/TTPmwf	249 ⁹⁵
YAE FT-11R/HP	5w 2m HT/FNB-38/cgr/TTP	269 ⁹⁵
YAE FT-23R-17	2.5w 2m HT/FNB-17/cgrmw	179 ⁹⁵
YAE FT-51R	2w 2m/440 HT/FNB31/TTPwf	419 ⁹⁵
YAE FT-40/40B-A16D	2w 440/16ky/99 chm	284 ⁹⁵
YAE FT-40/40B-A16S	2w 440/16ky/99ch/DVRv	299 ⁹⁵
YAE FT-600	Commercial grade HF Xcvtwvf	799 ⁹⁵
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YAE FT-8500	50/35w 2m/440 FM/dlx TTmwf	399 ⁹⁵
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YAE FTS-6	Encoder/decoder; 09-seriesmwf	9 ⁹⁵
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AT200H 2M HT./SW.....	CP912 CORDLESS PHONE.....	IC820H 2M/440 /ALL.....	292K EAR/MIC KENWOOD.....	ICFSW55 SWL.....
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RBP120 5W BATTERY.....	RS2 GUTTER MOUNT.....	M56 MARINE XCVR.....	5084 TNC/IC0 8P.....	
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PKB88 TNC.....	CONNECT SYSTEMS	R7100 12 RCVR.....	784D DSP FILTER.....	C168A 2M HT.....
PC12 TNC.....	CS800 DPLX PATCH.....	SM6 DESK MIC.....	8100W S/W RCVR.....	C188A 2M HT.....
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PK96 TNC.....	CUSHCRAFT	JPS	914 AUTO TUNER EXT.....	C508A 2M/440 HT.....
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ALFANO	CUSHCRAFT ARX2B 2M ANT.....	NR10 SPOT BF FILT.....	924 440HZ TUNER.....	DSP5992X DSP FILTER.....
DIG11 2M HT.....	A148SK STACK.....	NTR1 NOISE FILTER.....	9406 6M XCVR /NO MIC.....	UNIDEN
DIG5TH 2M/440 HT.....	A743 (A3/A3S).....	KANTRONICS	9420X 40M XCVR.....	BCT2 BEAR TRACKER.....
DJ111T 2M HT.....	LAC4 ARRESTOR.....	HM II+ SOFT.....	MIRAGE	BC178XL SCANNER.....
DJ180T 2M HT.....	LAC4NH ARRESTER.....	KAMPLUS.....	B1030G 2M 300W AMP.....	BC220XL SCANNER.....
DJ480T 440 HT.....	PS4A REMOTE POL SW.....	KENWOOD	B215G 150W 2M.....	BC235XL SCANNER.....
DR150T 2M XCVR.....	D6B2 2M ANTENNA.....	AT50 AUTO TUNER.....	B23 AMP/REFURB.....	BC3000XL 400CH.....
DR605T DUAL BAND XCVR.....	DAIWA	BT10 BATT CASE.....	MIRAGE B23G 2M 2/30W AMP.....	BC700A SCANNER.....
DR610T 2M/440 MOB.....	DP810 DIG RF METER.....	IF100 INTERFACE.....	B310G 100W 2M.....	BC760XL SCANNER.....
DX70T HF/6M XCVR.....	DP820 DIG RF MTR.....	KNB7A 800MA 12V.....	C0102G 220MHZ AMP.....	BC9000XL 500CH.....
DX70TH HF XCVR/6M.....	NSG60PA SWR METER.....	KSC14 CHGR.....	C2512G 20M AMP.....	MO635 MARINE XCVR.....
EDC34 DESK CHARGER.....	DIAMOND	MC45DM TTP MIC.....	D010ATVNM AMP.....	SC150B SCANNER.....
EDH11 AA PACK.....	K400-3/8C MT.....	MC45DM TTP MIC.....	KP1/10M PREAMP.....	XC3510 CORDLESS PHONE.....
EDX2 AUTO TUNER.....	K400CNO ANT MT.....	MC80 MIC.....	KP1/2M PREAMP.....	USTOWER
EM582 SPKR/MIC.....	K540 MOUNT.....	PB34 5W BATT.....	KP2/2M MAST P/AMP.....	SVC PLATFORM (HDX-555).....
ESC18 CASE DJ180T.....	K601M HIDE-TRUNK.....	PG38 NOISE FLTR.....	NP2 WATTMETER.....	VAN GORDON
MB110 BKR.....	RH707 2M/440 DUCK.....	PG38 CIG CORD.....	NAVAL	G5VR/M HF ANT.....
ALPHA DELTA	SRH815 ANT /SMA.....	PG38 NOISE FLTR.....	NR35V SPKR.....	VECTRONICS
HV LGHT PROT.....	SX100 HF-6M MTR.....	PG31 CIG CORD.....	MBVA	AT100 ACT ANT.....
AMECO	DIGIMAX	PG40 POWER SUP.....	MBVA TUNER /3KW.....	HPF1 HP FILT.....
HP300T HP PASS FILTER.....	D500 COUNTER.....	PS42 POWER SUP.....	OPTOELECTRONICS	VC300M MOB AT.....
H3000 MULTIMETER.....	DRAKE	SC41 CASE.....	R10.....	VIBROPLEX
I127 DC PS FOR P3.....	R8A RCVR.....	SPC31 SPKR MIC.....	SSB220A.....	100 ORIGINAL PRES.....
PA PREAMP/ANTENNA.....	SW1 SWL RCVR.....	SM23 EXT SPKR.....	OUTBACKER	140 EKI KEYSER.....
AMERITRON	SW8 SWL RCVR.....	THG71A 2M/440 HT.....	PERTH MOBILE ANT.....	WELLER
AL800 AMPLIFIER.....	GARMIN	TH235A 2M HT.....	PALOMAR	WSTAS IRON.....
AL800 HF AMP /2 BOXES.....	GPS38 GPS RCVR.....	TH235AH 2M 5W.....	M840 TUNER.....	WTCP STATION.....
ATR15 TUNER.....	GENESYS	TH79AD 2M/440 HT.....	PATCOMM	UNADILLA
QSK5 R/ SWITCH.....	CT221KE EARTALK.....	TH79ADH 2M/440.....	PC1600G HF XCV.....	WZA W20UHF BALUN.....
RS4 TMT SWITCH.....	T05K THROAT/MIC.....	TM261A 2M XCVR.....	PERIPHEX	YAESU
AL1200 HF AMPLIFIER.....	GROHE	TM742AD 2M/440 MOB.....	BP85S BATT PCK.....	CSCV10 CARRY CASE.....
AOR	VS2 STREHN.....	TS570D HF XCVR.....	PB1 BATT PACK.....	CSC67 SOFT CASE.....
AR3000 SSB/NO CELLULAR.....	GRUNDIG	TS570S HF XCVR /6M.....	PB13S BATT PACK.....	DV52 DIG REC UNIT.....
AR8000 COM RCVR.....	YACHTBOY 230 SWL.....	TS790A 2M/70CM XCVR.....	PB25/26S BATT PACK.....	FAS14R ANT SWITCH.....
ARRL	YACHTBOY 400 SWL.....	YG455C1 CW FILTER.....	POUCH	FNB26 7.2/1000 BAT.....
215 GGE MORSE SOFT.....	HEIL	YK88CN1 CW FLTR.....	CHESTB'S CHEST PACK.....	FNB31 600U/4 BAT.....
ASTATIC	AD1K ADAPTER.....	KLM CS2 CIR SWITCH.....	S1 HT CASE.....	FP1030A POWER SUPPLY.....
M575M6 HAND MICROPHONE.....	AD1Y CABLE.....	LARSEN	PREMIER	FP270 POWER SUPPLY.....
NIGHTEAGLE MICRICPHONE.....	H51 HEIL HAND SWITCH.....	K042/70D DUAL DUCK.....	SPM50S THROAT MIC.....	FT727 TONE BOARD.....
ASTRON	MS1 EAR/CLAMP HM10.....	NM0150TLM 2M ANT.....	RADIO AMATEUR CALL BOOK	FT10/41BA16 2M HT.....
RS12A 9A PS.....	PROMICRO 5 MIC/HOST.....	MAGELLAN	RACD05 CALLBOOK CD.....	FT10/41BA16S 2M HT.....
RS41 3A PS.....	PROMICRO4 MIC/HOST.....	GPS2000 GPS RCVR.....	RANGER	FT1000MP HF XCVR.....
SS25 POWER SUPPLY.....	PROSET4 HEADSET.....	GPS2000XL GPS RCVR.....	RC11000 /B COMM HT.....	FT290MKII 2M MBL.....
12-125 200W INVERTER.....	HYGAIN	GPS4000XL/12 GPS RCVR.....	RC11000 /GB COMM HT.....	FT411E 2M HT.....
AZDEN	HDR300A/HD ROTOR.....	MAHA	RC11000 /RB COMM HT.....	FT50R/41B SWR HT.....
AZ11 10M HT.....	IC400-155 BOOM MIC.....	MHA102 2M 50W AMP.....	RC16060 MARINE.....	FT50RD 5W DUAL HT.....
AZ21 2M HT.....	ICOM	MHBP8H 8.4/1.8 NIMH.....	RF CONCEPTS	FT50RD/40B 2M/440 HT.....
PCS7300H 440 MBLE.....	AH2B BPR MT/WHIP.....	MHFN12 12/900 NIMH.....	VHF160 2M 1/60W.....	FT5200 2M/440 XCVR.....
PCS7800H /NO BCKT.....	AT150 100W TUNER.....	MHPB17 12/900 NIMH.....	144P AMP.....	FT8100R 2M/440 XCVR.....
PCS7800H 10M FM.....	AT160 AUTO TUNER.....	MH101Y2 CHGR.....	223 2M 2/30W NEW.....	FT811 UHF HT.....
PTT01 PTT SWITCH.....	BP121 7.2V/400MA.....	MAXON	440P 440 3/20 AMP.....	FT840 HF XCVR.....
SDX514W SPK/MIC.....	BP152 1100MA/6V.....	MX27KC CB XCVR.....	RMS	FT8500/FS10 2M/440 MBLE.....
B&K	BP157 900MA/2V.....	MX49FX 49 MHZ XCV.....	CN220 METER.....	FT900/CAT CW/SEP.....
2911 METER.....	BP195 BATT.....	MX49HX 5CH 49MHZ.....	ROSETTA	FT920 HF XCVR.....
B&W	BP7 13.2V/450MA.....	WX70 WEATHER MONITOR.....	WINRADIO.....	G450XL ROTOR.....
ACL-8-30 HF ANTENNA.....	BP81 BATTERY.....	MFJ	SANGEAN.....	G800S MED/HVY DUTY.....
B&W	CSWHH SOFTWARE.....	1020B ACT RX ANT.....	ATS202 SWL RCVR.....	MD100A8X DESK MIC.....
BWD 1.8-30 90 FT. DIPOLE.....	EX309 ADAPTER.....	1025 NOISE CANC ANT.....	ATS818 AM/FM/SW.....	MH19A2B EARPC/MIC.....
BWD 1.8-30 STAINLESS.....	EX627 HF ANT SEL.....	1025 NOISE CANC ANT.....	ATS909 SWL.....	MH39 MIC (FT8500).....
BIRD	HM46 SPK/MIC.....	114 LARGE LED CLOCK.....	SGC	VC22 HDST /VOX.....
251 950-1260MHZ.....	HM94 SPK/MIC.....	1214PC INTERFACE.....	1412 REMOTE KIT.....	VXK1 FRS HT.....
25L 1.7-2.6GHZ.....	HM90A WIRELESS MIC.....	1272B TNC/MIC SWITCH.....	5232 HANDSET/SG2000.....	VXR5000V 2M RPTR.....
BUCKMASTER	HM92A MIC.....	1272MX TNC/MIC SW.....	5412 SG200 TUNER.....	VX1R 2M/440 COMPACT HT.....
HAMCALL CD-ROM.....	HS51 HEADSET.....	1272MYH TNC/MIC SW.....	5417 SG230 JSG231.....	VX1R 2M/440 HT.....
CENTAUR	ICP4AT 440 HT /UT50.....	1278B TNC/PACTOR.....	7007 POWER CLEAR DSP.....	XFI.9M20001 CW FILT.....
B41Y1050 BEAM BALUN/SCU.....	IC22A 2M HT.....	1278B/DSP TNC.....	SONY	XFI100C CW FILTER.....
CS	IC22A 2M HT.....	1287D DISK ONLY.....	AN1 SW ANT.....	YS60 SWR METER.....
CS568 PATCH.....	IC26XAT 2M 3W HT.....	1289 MULTICOM.....		
410 PERSONAL PATCH.....	IC26XAT/HP 2M 7W HT.....	1289M 3 1/2 IBM.....		

CONSUMER PRODUCT PRICE LIST

ALINCO (ALI)	Reg	Sale
DJ-546 Family radio svc handheld/batt/cgr ...	\$149.95	129 ⁹⁵
COBRA (COB)		
CP-912 900MHz dig sp spec cordless ....Δmf	\$369.95	179 ⁹⁵
UNIDEN (UNI)		
CT-301 Cordless phone	Δm	\$ 69.95 29 ⁹⁵
DX-3555 25 ch scrambled dual pad	Δmf	159.95 79 ⁹⁵
DX-4519 25 ch scrambled cordless phone Df	129.95	59 ⁹⁵
EXP-9100 900MHz digital spread spec	Δm	459.95 199 ⁹⁵
XC-3510 25 ch cordless phone	Δmf	109.95 49 ⁹⁵
CHEROKEE (CHR)		
AH-27 Handheld CB		\$169.95 119 ⁹⁵
AH-100 SSB/AM handheld CB		399.95 279 ⁹⁵
CB5-1000 SSB/AM Base CB		449.95 299 ⁹⁵
COBRA (COB)		
7 Ultra AM Mobile CB	Δmf	\$ 59.95 29 ⁹⁵
10 Ultra AT AM Mobile CB w/magnet mt ant	79.95	59 ⁹⁵
18 Ultra AM Mobile CB	Δmf	99.95 59 ⁹⁵
18WX ST Sound Tracker AM Mobile CB w/WX	99.95	79 ⁹⁵
190X II AM Mobile CB	69.95	49 ⁹⁵
19LT II AM Mobile CB	Δmf	79.95 49 ⁹⁵
19 Ultra II AM Mobile CB	69.95	49 ⁹⁵
21LT ST Sound Tracker AM Mobile CB	119.95	99 ⁹⁵
21LT WX AM Mobile CB w/WX	Δmf	119.95 79 ⁹⁵
25LT ST Sound Tracker AM Mobile CB	149.95	119 ⁹⁵
25LT WX AM Mobile CB w/WX	Δmf	169.95 109 ⁹⁵
25WX ST Sound Tracker AM Mobile CB w/WX	169.95	129 ⁹⁵
29LT (29 Classic) AM Mobile CB	Δmf	179.95 129 ⁹⁵
29LT ST Sound Tracker AM Mobile CB	189.95	149 ⁹⁵
29WX ST Sound Tracker AM Mobile CB w/WX	199.95	159 ⁹⁵
HH-70T AM Remote CB	Δw	149.95 109 ⁹⁵
93LT WX AM Base CB/WX/tone alert Δmf	189.95	119 ⁹⁵
148GTL ST Sound Tracker SSB/AM Mobile CB	289.95	199 ⁹⁵
2010GTL WX SSB/AM Base CB w/WX	539.95	349 ⁹⁵
HH-35 AM portable CB Xcvr	Δmf	89.95 59 ⁹⁵
HH-36ST Sound Tracker handheld CB	89.95	69 ⁹⁵
HH-40 5w 40 ch CB walkie-talkie	Δm	159.95 59 ⁹⁵
AT-60 Trunk lip/roof mt CB antenna	Δmf	19.95 14 ⁹⁵
AT-70 Magnet mt CB antenna	19.95	14 ⁹⁵
FRS-200 Family radio service handheld	†	159.95 99 ⁹⁵
ICOM (ICO)		
IC-4008A Family radio svc handheld		\$160.00 129 ⁹⁵
KENWOOD (KEN)		
UBZ-LF14 Family radio svc black handheld ...	\$159.95	149 ⁹⁵
EMC-3 Label clip mic/ear piece	29.95	
EMC-3 VOX/boom mic headset	59.95	
SMC-34 Spkr/mic/vol cont/function keys	39.95	
MIDLAND (MID)		
75-510 Family radio svc handheld/batt/cgr .	\$199.95	119 ⁹⁵
22-410 Speaker/mic for 75-510	34.95	
22-430 Throat mic/ear/PTT box; 75-510	69.95	
UNIDEN (UNI)		
PC-66XL AM Mobile CB	129.95	89 ⁹⁵
PC-76XL AM Mobile CB	179.95	109 ⁹⁵
PC-76XLW AM Mobile CB w/WX alert	189.95	129 ⁹⁵
PRO-340XL 40 ch portable CB w/rubber ant	89.95	59 ⁹⁵
PRO-350XL 40 ch handheld CB radio	169.95	99 ⁹⁵
PRO-501XL AM Mobile CB	49.95	39 ⁹⁵
PRO-510XL AM Mobile CB	69.95	44 ⁹⁵
PRO-510AXL AM Mobile CB w/mag mt ant	69.95	49 ⁹⁵
PRO-520XL AM Mobile CB	89.95	59 ⁹⁵
PRO-538W AM Mobile CB w/WX	109.95	74 ⁹⁵
PC-122XL SSB/AM Mobile CB	199.95	129 ⁹⁵
Grant-XL SSB/AM Mobile CB	259.95	169 ⁹⁵
Washington SSB/AM Base CB	349.95	249 ⁹⁵
ESP-26 External speaker	16.95	
YAESU (YAE)		
VXF-1 Family radio service black handheld ..	\$159.00	99 ⁹⁵
CLIP-8 Belt clip for VXF-1	8.95	
EDC-15 DC adapter	38.95	
FNB-53 Nicad battery pack	19.95	
MH-34B4B Speaker/mic	30.95	
MH-37A4B Earpiece/mic	30.95	
NC-66B Wall charger for FNB-53	18.95	
AOR (AOR)		
SC-2700 Soft case for AR-2700	Δmf	\$ 19.95 14 ⁹⁵
AR-3000A 1-2036MHz dtx w/SSB/cell bkld ...	1329.95	1049 ⁹⁵
MM-1 Mobile mounting bracket; AR-3000A ..	19.95	
SOU-5000 Spec disp; AR3000A/icom Base ..	1099.95	899 ⁹⁵
AR-5000 .01-2600MHz scan/cell bkld/spec ord	2199.95	1729 ⁹⁵

AOR - continued	Reg	Sale
AR-8000B 5-1900MHz hand/SSB/cell bkld ...	799.95	599 ⁹⁵
SAC-8000 Opt Scout/AR8000 connect kit ..	14.95	
SC-8000 Soft case for AR-8000	19.95	
BMI (BMI)		
Nitelogger II Auto recorder activator	\$ 69.95	
RC-1A Impedance matching patch cord	19.95	
GROTHE (GRO)		
VS-2 Emergency vehicle siren	\$ 99.00	89 ⁹⁵
VS-2L/A Window mt siren/amber light	249.95	
VS-2L/B Window mt siren/blue light	249.95	
VS-2L/R Window mt siren/red light	249.95	
VS-2LS/A Window mt siren/amber strobe	299.95	
VS-2LS/B Window mt siren/blue strobe	299.95	
VS-2LS/R Window mt siren/red strobe	299.95	
VS-3 Volunteer vehicle PA/horn w/spkr	159.00	129 ⁹⁵
VS-4 P/A emergency vehicle siren w/spkr ..	169.00	139 ⁹⁵
CHANNEL MASTER (CHA)		
5095A Base mon ant/5' trimast/50' cbl Δmf	\$ 59.95	49 ⁹⁵
Monitor America (MON)		
Monitor America Scanner frequency book ...	\$ 29.95	
OREGON SCIENTIFIC (ORE)		
WR-3300 Weather/hazard radio/alert w/ps ...	\$ 59.95	49 ⁹⁵
WR-8800 Port WX/hazard radio/alert w/ps ...	79.95	59 ⁹⁵
UNIDEN BEARCAT (UNI)		
BCT-2 Pre-prog warning scan/AC ps	Δmf	\$239.50 99 ⁹⁵
BCT-10 Pre-prog hiway info sys scan	Δmf	369.99 139 ⁹⁵
BC-147XLT-1 16 ch prog scanner/instant Wx	169.95	99 ⁹⁵
BC-148XLT-1 20 ch prog scanner/WX alert ..	179.95	99 ⁹⁵
BC-178XLT 100 ch prog scan/air/WX alert ..	229.95	139 ⁹⁵
BC-350A 50 ch prog/service search w/AC ps ..	199.95	119 ⁹⁵
BCT-7 Pre-prog warning scan/air/800/AC ps	319.95	189 ⁹⁵
BCT-12 Pre-prog mobile warning scanner	349.99	199 ⁹⁵
BC-700A 50 ch prog/svc search/800/AC ps ...	299.95	169 ⁹⁵
BC-760XLT 100 ch prog/svc search/800/AC ps	369.95	219 ⁹⁵
BC-003 Switch box for BC-002	10.95	
BC-004 FR preamp for BC-760XLT	27.95	
BC-860XLT 100 ch prog scanner/air/800	319.95	189 ⁹⁵
BC-890XLT 200ch 956MHz scan/WX alert Δmf	439.95	249 ⁹⁵
BC-895XLT 300 ch prog scanner/trunking ...	499.95	319 ⁹⁵
BC-9000XLT 500 ch 25MHz/1.3GHz	699.95	429 ⁹⁵
BC-005 CTCSS tone board; 8500/9000XLT ..	37.95	
BC-60XLT-1 30ch prog pocket; use AA batts ..	169.95	99 ⁹⁵
PS-001 DC power cord	8.95	
BC-80XLT 50 ch prog pocket scanner/800	249.95	159 ⁹⁵
AD-100 AC adapter/batt cgr; earlier scanners	16.95	
AD-140 Extra charger; BC-100XLT/200XLT ...	13.95	
BP-70 Extra battery for BC-70XLT	Δm	27.95
BP-200 Extra battery; BC-200XLT	26.95	
BP-205 Extra battery; BC-100XLT	26.95	
BC-120XLT 100 ch prog pocket w/aircraft ...	249.95	149 ⁹⁵
BC-230XLT 200ch prog pocket/air/800/xtra batt	459.95	239 ⁹⁵
SC-150B 100 ch black sport pocket/800	299.95	179 ⁹⁵
AD-70 Extra charger	10.95	
BP-120 Extra battery	18.95	
LC-120 Carrying case; BC120/230/235XLT ..	19.95	
LC-150B Carrying case for SC-150B	19.95	
UA-502 Cig power cord	11.95	
BP-235XLT 300ch prog pocket/trunk/xtra batt	499.95	299 ⁹⁵
BP-180 Extra battery	16.95	
BC-300XLT 400 ch 25MHz/1.3GHz pocket ...	699.95	399 ⁹⁵
BP-2500 Extra batt; BC2500/3000	Δmf	63.95
LC-2500 Carrying case; BC-2500/3000XLT ..	20.95	
NPD-001 National frequency book	†	14.95 9 ⁹⁵
RFD-001 IN/L/KY/OH/MI/WI freq book	14.95	
COURIER (COU)		
Procom 2w VHF FM hand-held/batt/cgr	\$199.95	99 ⁹⁵
AUC-12 Cig lighter charger adapter	Δw	12.00 4 ⁹⁵
M-54 5w 4ch VHF hand-held/batt/cgr/151.625	299.95	199 ⁹⁵
M-510 5w 10ch synth VHF FM hand-held ...	399.95	269 ⁹⁵
MU-510 5w 10ch synth UHF FM hand-held ...	439.95	299 ⁹⁵
CKK-510 Cloning cable for M-510/MU-510 ..	18.95	
ICOM (ICO)		
IC-F10-1 2w 146-174MHz 24 ch HT	Δm	\$495.00 299 ⁹⁵
IC-F20-2 2w 440-470MHz 24 ch HT	Δm	559.00 339 ⁹⁵
AD-54 Cgr adapt; BM113U; F10/F20	Δm	34.00 24 ⁹⁵
BM-113U Trickle charger; F10/F20	Δm	26.00 19 ⁹⁵
EX-1690 PC prog software; F10/F20	Δm	40.00 29 ⁹⁵
A-22 5w PEP compact Navicom air handheld	720.00	549 ⁹⁵

MAXON (MAX)	Reg	Sale
MX-49FX 5 ch 49 MHz ear mic Xcvr		\$ 89.95 49 ⁹⁵
MX-49HX 5 ch 49 MHz euro-design headset Xcvr		89.95 49 ⁹⁵
MX-49SX 49 MHz euro-design headset Xcvr .		59.95 29 ⁹⁵
PC-50 5ch 49MHz hand-held/PTT/VOX headset		79.95 49 ⁹⁵
FRS-114 FRS handheld	Δmf	119.95 69 ⁹⁵
DV-7510 Wall charger; FRS-114	Δmf	12.95
WIA-9F Ear speaker; FRS-114	Δmf	7.95 4 ⁹⁵
MIDLAND (MID)		
75-400 2w 2ch VHF hand-held/batt/cgr/154.60		\$199.95 79 ⁹⁵
RANGER (RAN)		
LC-1000 Leather case	Δmf	\$ 24.95 19 ⁹⁵
SRA-106A Speaker/mic	Δmf	44.95 29 ⁹⁵
SRA-107 Speaker/mic	Δmf	44.95 34 ⁹⁵
ICOM (ICO)		
IC-M10A (01) 3w marine hand-held/AA holder		\$287.00 179 ⁹⁵
IC-M45W White 25w VHF marine Xcvr		319.00 199 ⁹⁵
M-710 (04) 150w HF marine SSB .spec order		2100.00 1399 ⁹⁵
M-710-05 150w 1.6-27.5MHz SSB .spec order		2400.00 1599 ⁹⁵
AT-130 HF marine auto ant tuner spec order		735.00 499 ⁹⁵
KENWOOD (KEN)		
TKM-707 150w HF marine SSB Xcvr spec order		2249.95 1249 ⁹⁵
KAT-1 HF marine auto ant tuner .spec order		999.95 569 ⁹⁵
RANGER (RAN)		
RCI-6060 25w VHF marine Xcvr/scan	Δmf	\$279.00 129 ⁹⁵
RCI-8000 5w VHF marine handheld	Δmf	279.00 129 ⁹⁵
UNIDEN (UNI)		
MC-535 25w 90 ch VHF marine Xcvr		\$199.99 119 ⁹⁵
MC-1010 25w VHF marine Xcvr		299.99 139 ⁹⁵
MC-1020 25w VHF marine Xcvr		319.99 159 ⁹⁵
HH-940 1w VHF marine hand-held		309.99 159 ⁹⁵
HH-955 5w VHF marine hand-held		199.99 129 ⁹⁵
HH-980 5w 90 ch deluxe marine hand-held ..		399.99 209 ⁹⁵
SHAKESPEARE (SHA)		
396-1 3 db, 5' antenna, less mount		\$107.50 59 ⁹⁵
497 6 db, 8' antenna, less mount		89.50 49 ⁹⁵
5202 6 db ant w/chrome ferrule, less mt		133.95 69 ⁹⁵
5206-C Economy 8' ant w/chrome ferrule, no mt		56.95 39 ⁹⁵
366H Chrome zamac ratchet mount		42.95 29 ⁹⁵
495 White plastic lift & lay mount		23.50 16 ⁹⁵
420 3 db, 5' ant w/fold-down mount		98.50 59 ⁹⁵
420-M-2 3 db, 5' mast mt ant/coax	Δmf	119.50 14 ⁹⁵
5204-8 Combo CB/VHF marine 8' ant	Δmf	192.50 59 ⁹⁵
AES 12vdc ACCESSORIES (AES)		
SB-115 AC-DC 5A converter	Δmf	\$ 39.95 19 ⁹⁵
SB-151 300W DC to AC inverter	Δmf	79.95 39 ⁹⁵
SC-107 Triple socket lighter plug	Δmf	14.95 6 ⁹⁵
SC-146 Double socket lighter plug	Δmf	12.95 4 ⁹⁵
SC-189 Rechargeable fog lantern	Δmf	49.95 29 ⁹⁵
SC-192 Multi-plug 4-in-1 12v light	Δmf	19.95 9 ⁹⁵
SC-193 12v turbo-vac	Δmf	19.95 9 ⁹⁵
SC-199 Compact cordless spot/yellow	Δmf	29.95 19 ⁹⁵
SC-784 Quartz hal spot, 400K candle Δmf		19.95 12 ⁹⁵
SC-812 Flor work light/upright stand Δmf		12.95 6 ⁹⁵
SC-784B Quartz hal spot, 1M candle	Δmf	29.95 19 ⁹⁵
X-10 Home Automation/Security (X10)		
CK-11A X-10 ActiveHome automation/win soft †		\$119.99 89 ⁹⁵
DS-7000 7-piece home security system		269.99 199 ⁹⁵
PK-9 REX-10 barking dog alarm	†	79.99 65 ⁹⁵
DM-10A Motion detector for REX-10	†	34.99 27 ⁹⁵
AM-466 3-pin grounded appliance module †		16.99 14 ⁹⁵
AM-486 2-pin polarized appliance module †		15.99 13 ⁹⁵
DS-10A Long range door/window sensor	†	31.99 24 ⁹⁵
DW-534 Door/window sensor	†	21.99 16 ⁹⁵
KF-574 Key fob security remote control	†	26.99 21 ⁹⁵
LM-465 Lamp module	†	15.99 12 ⁹⁵
MC-460 6 function 8 unit mini controller ..	†	15.99 10 ⁹⁵
PH-508 Remote 110 db siren	†	59.99 39 ⁹⁵
PR-511 2 floodlight motion detect/rem light †		64.99 49 ⁹⁵
RW-694 4 unit wireless wall switch	†	21.99 13 ⁹⁵
RW-724 3 unit+dimmer wirels wall switch †		19.99 13 ⁹⁵
RW-6900 Wireless wall switch set	†	31.99 21 ⁹⁵
SC-503 6 function 16 unit maxi controller †		29.99 21 ⁹⁵
SH-10A Indoor 90 db remote alarm siren ..	†	31.99 24 ⁹⁵
SP-554A Wireless motion detector	†	59.99 47 ⁹⁵
SR-227 Wall receptacle mod/custom plate ..	†	21.99 17 ⁹⁵
TH-2807 Thermostat set-back controller	†	21.99 16 ⁹⁵
WS-467 Wall switch module	†	15.99 13 ⁹⁵



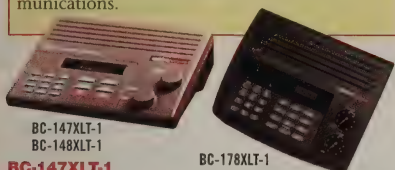
Scan the Action!

**Ham Radio • Police • Sheriff • Fire
Emergency • Highway Patrol
Paramedics • Weather • Auto Races
Sports Events • More!**

VHF Low/High & UHF — Police, fire, sheriff, ambulances in smaller cities/towns. State police. Railroads. VHF-marine. 2-meter & 70cm Ham. Businesses. NOAA weather. Government.
VHF-Air — Commercial & private planes. Airport towers. Aviation-related communications. Air navigation.

800MHz — Police, fire & emergency services in major cities and metro areas (trunked). Some business 2-way radio systems. (Cellular frequencies are blocked.)

Extended Coverage — Military aircraft. Amateur radio. Some wireless microphones. Some radio/TV remote links. Microwave communications.



BC-147XL1

BC-148XL1

BC-178XL1

BC-147XL1
16 channel Base unit with 10 bands, including weather. Covers 29-29.7, 29.7-50, 50-54, 136-144, 144-148, 148-174, 406-420, 420-450, 450-470 & 470-512 MHz. Two-digit LED display for current channel selection & scanning. Keyboard Entry; Direct Channel Access; Manual Step Tuning; Lockout; Priority; Review; Weather Search; Automatic Squelch; Track-Tuning; Memory Back-up. 9" w x 2 1/2" h x 6 1/2" d, 1.2 lbs... **\$99⁹⁵**

BC-148XL1
20 channels, 10 bands with weather alert. Digital; Programmable; AC/DC operation. Frequency coverage: 29-54, 136-174 and 406-512 MHz. Weather; Priority; Lockout; Squelch. AC adapter & telescoping antenna. 9" w x 2 1/2" h x 6 1/2" d, 1.2 lbs... **\$99⁹⁵**

BC-178XL1
100 channel programmable Base unit with aircraft. 11 bands, 5 scanning banks. LCD display; TurboScan™ and search; Weather scan search; Five priority channels; Data skip; Service search; Automatic squelch; Programmable delay. AC adapter and telescoping antenna. 9" x 6 1/2" x 2 1/2", 1 lb. 7 oz.... **\$139⁹⁵**



BC-350A

50 channel Mobile or Base unit with Aircraft; 11 bands, LCD display; Super TurboScan™ @ 100 channels per second. 20 programmable Private Channels; 20 programmable Police Channels; 10 programmable Fire & Emergency channels. Band scan for aircraft; Marine & Weather; Band search. Mounting bracket; AC adapter, DC & cigarette power cords. 5 1/2" x 6 1/2" x 1 1/2", 1 lb. 11 oz. **\$119⁹⁵**

BC-700A 50 channel programmable Mobile/Base unit with Aircraft. 12 bands, LCD display, Turbo Scan™. Same as BC-350A with 800MHz (no cellular).... **\$169⁹⁵**



MONITOR AMERICA - 1108 pages!

A complete listing of public safety and business communications of almost every community in the nation. Includes maps, tone codes and repeater input & output frequencies. Listings of AM & FM radio stations with frequencies and formats. Race car teams, special sections of Disney and other vacation spots, more... **\$29⁹⁵**

BC-760XL1



BC-895XL1



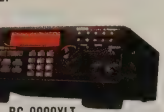
BC-760XL1

100 programmable channels, 5 scanning banks, 12 bands and Weather. Covers 29-54, 118-136, 144-174, 406-510, 470-512 & 806-956 MHz (no cellular). Auto search; Priority. 13.8V DC, 110V AC adapter included 6" w x 1 3/4" h x 7 1/2" d, 1 lb, 3 oz. **\$219⁹⁵**

BC-895XL1 "TrunkTracker"

300 channels, 12 bands including Aircraft and 800 MHz; 10 banks. Covers 29 to 956 MHz (cell blocked). Turbo™ Scan; One-touch weather; Weather alert; Manual channel access; Built-in CTCSS; Trunk search; Scan lockout and delay; RS-232C port; VFO control; 10 priority channels; Signal strength meter; Auxiliary tape output; Automatic store; 30 trunking channel indicator annunciators; 3-day Memory backup; Programmable search; Lockout. 10 1/2" w x 3 3/8" h x 7 1/2" d, 3 1/2 lbs... **\$319⁹⁵**

BC-860XL1/BC-890XL1



BC-860XL1

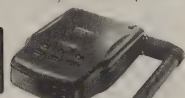
100 channels, programmable with Aircraft. 12 bands, 10 banks. Covers 29 to 956 MHz (no cellular). Full frequency LCD display; TwinTurbo™ Scan & Search modes; One-touch Weather; Manual channel access key; Priority mode. 9" w x 2 1/2" h x 6 1/2" d, 1.2 lbs... **\$189⁹⁵**

BC-890XL1

200 channel programmable for Mobile or Base with Aircraft, Military Air & 220 MHz Ham Band. 14 bands, 10 scanning banks. LCD display, TurboScan™; 10 priority channels; VFO; Frequency transfer; Autostore & sort; Count; Weather alert; Optional CTCSS; 110V AC adapter. 10 1/2" w x 7 1/2" h x 3 1/2" d, 3 1/2 lbs... **\$249⁹⁵**

BC-9000XL1

500 channel continuous band scanner. Covers 25 to 1300 MHz (no cellular). 20 banks. VFO control; Ten priority channels; AM-FM/wide and narrow FM modes; TurboScan™ and Search; LCD dot matrix alpha display w/illumination control; Data skip; Transfer; Automatic store; Aux. line output for recording; 110V AC adapter, optional CTCSS. 10 1/2" w x 7 1/2" d x 3 1/2" h, 4 lbs... **\$429⁹⁵**



BCT-7 Bear Tracker 800

BCT-10/12

Pre-programmed with all frequencies for Highway Patrol, D.O.T, Local/County Police, News, Fire, Aircraft & CB services. Selectable by state (except Hawaii). 12 bands, 100 user programmable channels: Highway Patrol Priority Alert; Data Skip, Weather Scan. 13.8VDC. 110V AC adapter and mobile mount included. 5" w x 7" d x 1 1/2" h, 1 lb, 11 oz... **\$189⁹⁵**

BCT-10 BearTracker Highway Information System
A sophisticated highway alarm system with 886 pre-programmed frequencies that responds to radio signals emitted from special secondary transmitters installed on most highway patrol vehicles. Audible and visual alarms, plus signal strength LEDs indicate the presence and distance of patrols. **CLOSEOUT \$139⁹⁵**

BCT-12 BearTracker Highway Information System
Covers low, high, UHF and 800MHz Highway Patrol, Police, Sheriff, Weather, News and Transportation frequencies for all 50 states and Canada. Weather emergency tone alert, priority, channel lockout, digital signal meter level meter... **\$199⁹⁵**



SPECTRUM FCC DATABASE CD ROM by PerCon Corp.

A nationwide frequency database with over 3 million records. The data includes: Frequency; Call sign; Class of Station Code; Radio Service Code; Company Name; Transmitter City/County/State/Latitude & Longitude, and number of units for Vehicle, Marine, Aircraft, Portable, and Pagers. Records for police, hospitals, fire, state and local governments, businesses, airlines, theme parks, broadcasting and much more. Six difference searches. IBM 386 or higher, Mac system 7 and up ... **With the Purchase of any Radio (Limited Time) \$99⁹⁵**



BC-60/80XL1

BC-120/230XL1

BC-3000XL1

BC-235XL1

BC-60XL1-1

30 channel, programmable handheld scanner. 10 bands. Covers 29 to 512 MHz. Two-digit LCD channel display; Programmable chain search; One-touch weather; Lockout; Memory backup; Low-battery indicator; Keypad lock; Built-in scan delay; Manual channel access; Track tuning; Keypad lock feature. Uses four "AA" alkaline or nicads or AC operation with included 110V AC adapter. 2 1/2" w x 6 1/4" h x 1 1/2" d, 10 1/2 oz... **\$99⁹⁵**

BC-80XL1

50 channel, programmable handheld scanner. Covers 29 to 956 MHz (no cellular). 11 bands, 5 banks, 5 priority channels and One-touch weather. Manual channel access; Bands search; Full frequency LCD display; Battery-low indicator. Uses four "AA" alkaline or nicad rechargeable batteries (not incl.). AC adapter included for 110V operation. 2 1/2" w x 6 1/4" h x 1 1/2" d, 10 1/2 oz. **\$159⁹⁵**

BC-120XL1

100 channel, programmable handheld scanner with Aircraft frequency coverage. 11 bands, 10 scanning banks, LCD display, Turbo Scan™ and search. One-touch weather, 10 priority channels, data skip, memory backup. Belt clip, battery and wall charger included. 2 1/2" w x 1 1/2" d x 6 1/4" h, 1 1/2 oz... **\$149⁹⁵**

BC-230XL1

200 channel, programmable handheld scanner with Aircraft & 800 MHz (no cellular). 12 bands, 10 scanning banks. Programmable search. LCD frequency display, Turbo Scan™ and search. One touch weather access, 10 priority channels, data skip, memory backup. Includes two rechargeable nicad batteries and charger module, belt clip. 2 1/2" w x 1 1/2" h x 1 1/2" d, 12 1/2 oz... **\$239⁹⁵**

BC-3000XL1

400 channel, continuous band scanner. Covers 25 to 1300 MHz (no cellular) in 12 bands. 20 scanning banks, 10 priority channels. VFO control; TurboScan™ and search, auto-weather, auto-store; channel lockout. Includes rechargeable nicad battery and charger. 2 1/2" w x 1 1/2" h x 1 1/2" d, 12 1/2 oz... **\$399⁹⁵**

BC-235XL1 "TrunkTracker"

300 channel, programmable handheld scanner. 12 bands including Aircraft and 800 MHz. Covers: 29 to 956 MHz (no cellular). Programmable search; Trunk lockout; Memory backup; Trunk delay; Manual channel access; Trunk scan; Preprogrammed service search; Trunk search; Channel lockout; 10 priority channels; AC/DC operation, includes two rechargeable nicad batteries & charger. 2 1/2" w x 6 1/4" h x 1 1/2" d, 12 1/2 oz... **\$299⁹⁵**

UNIDEN SC-150B "SPORTCAT"

100 channel programmable handheld scanner with Aircraft, Weather and 800 MHz band (no cellular). Designed for the racing fan with 10 one-touch, Direct Access keys for instant selection of active sports channels: Motor Racing, Air Shows & Special Events. 12 bands; 10 scanning banks; LCD display; Programmable band search; Data skip, TurboScan™ scans at 100 channels per second, allowing instant access to up to 100 memorized frequencies in the 29-54, 108-174, 406-512 & 806-956MHz bands. 10 preprogrammed TurboSearch™ keys allow band-edge to band-edge frequency locating at 300 channels per second. Rechargeable battery, wall charger, flex antenna, belt clip & earphone. 2 1/2" w x 1 1/2" d x 6 1/4" h, 12 oz. **\$179⁹⁵**



AR-3000A

Professional-grade Desktop Scanner and Receiver for serious wide-spectrum monitoring. Provides continuous AM/FM/SSB tuning from 100kHz to 2036 MHz (no cellular) via keypad or dial. 400 memories. Scans and searches at 50 channels per second. 15 band-pass filters & low noise, wide dynamic range GaAs FET RF amplifiers. Backlit LCD display, programmable tuning steps, priority, delay, recorder activator. Requires 9 to 16V DC. Includes 120V AC adapter, BNC telescopic whip & DC lead. 5 1/2" w x 3" h x 7 1/4" d, 2 1/2 lbs **\$1049⁹⁹**

AR-5000

All-mode, super-wide coverage receiver, tunable from 10kHz - 2600MHz (cell blocked). 650 memories, 50 channel-per-second scan & search, 1Hz to 1MHz programmable tuning step, selectable IF bandwidths, 12VDC & 120VAC. **Special Order \$1729⁹⁹**

AR-8000B

Feature packed Handheld Scanner. Covers 500kHz to 1900MHz (cell blocked). High visibility dot matrix LCD readout provides great detail including: Signal strength bar meter; Backscope; Dual VFOs displayed simultaneously; Alpha numeric comments stored along with frequency, mode, attenuation, and more! 1000 memories with 20 banks of 50 channels. Step sizes 50Hz to 1MHz. Scan/Search speed up to 50 channels per second. Computer control & cloning allows up/down load of frequencies, mode, step size and more with your computer or share your memories with a friend (requires optional cables). Internal ferrite antenna operates below 2MHz. Come with four "AA" nicads & wall charger **\$599⁹⁹**

AOR SDU-5000

RF Spectrum Display Unit. Provides a visual indication of stations above and below your receiving frequency. Even if transmissions are short, you can watch for stations to pop-up over the 10MHz window, then zero in. Menu-driven system for EZ operation. A 3.1" matrix color LCD display with resolutions of 5 or 30KHz. A companion to the AOR AR-3000A & other receivers with 10.7MHz output. **\$899⁹⁹**

Channel Master Scanner Antenna

E-X-T-E-N-D your scanner range many times with an externally mounted Channel Master Monitenna. This wide-band antenna provides best scanner reception for the 30-50, 148-174, 450-470, 470-512 & 800-912 MHz bands.

5095A High-strength aluminum, and weather protected. Everything for a rooftop installation: Monitenna, 50 ft. of coaxial cable with Motorola plug, 5 ft. tri-mast mount, 2 ft. extension stand, double headed nails and sealing washers.

Limited Quantity • \$49⁹⁹

AOR

Family Radio Service

The Perfect Communication for:

Vehicle to vehicle on trips • Hunting • Fishing
Camping • Biking • Shopping • Hiking • Climbing
Sporting events • Family activities • Just fun!

No FCC License Required

No Test, No Fee - Just Use It!

Free air time • No cellular fees or time limits • Clear audio quality • Auto squelch reduces unwanted noise • Great range - Up to 2 miles depending on terrain • Auto Power Save extends battery life

14 Special UHF FM Channels - 462.5625 to 467.7125 MHz in 50kHz steps

**vertex****YAesu****VXF-1**

- 500mw
- Coded squelch - private listening
- Uses three "AA" batteries
- 4 1/2" h x 2 1/2" w x 1" d **\$99⁹⁹**

Options: Nicad Battery Pack; Wall Charger; Speaker/Microphone; Earpiece Microphone; VOX Headset; Car Adapter; Earphone - See Price List

KENWOOD

UB2-LF14

- 300mw
- Coded squelch - private listening
- Call tone paging
- Uses three "AA" batteries
- 4 1/2" h x 2 1/2" w x 1 1/2" d **\$149⁹⁹**

Options: Speaker/Microphone; "FreeTalk" VOX Headset; Clip Microphone/Earphone - See Price List

MIDLAND

75-510

- 500mw
- Coded squelch
- Four "AA" Nicad batteries & wall charger included
- 4 1/2" h x 2 1/2" w x 1 1/2" d **\$119⁹⁹**

Options: Speaker/Microphone; Throat Mic. - See Price List

Cobra

FRS-200

- Up/down channel and volume buttons
 - Lighted LCD display
 - 4 1/2" h x 1 1/2" w x 1 1/2" d **\$99⁹⁹**
- SPECIAL**

maxonPersonal Communicators
SYSTEMS

Low Power, 1/4 mile average range • Dual conversion superheterodyne receiver provides crisp, clear voice transmission • Compatible use for group communications • Push-to-talk (PTT) or Voice activated (VOX) lets you talk-to-transmit • No license required

CHANNELS: A - 49.830 MHz; B - 49.845 MHz; C - 49.860 MHz; D - 49.875 MHz; E - 49.890 MHz

MX-49SX A single-channel unit featuring a lightweight adjustable headset with retractable whip antenna and boom-microphone with windscreen. LED power indicator, battery charger jack. Range up to 1/4-mile, average. Uses two "AA" alkaline or rechargeable nicad batteries. 5" w x 2 1/2" h x 1" d, 9 oz. Specify channel A, B or E **\$29⁹⁹**



MX-49FX 5 selectable channels (A, B, C, D & E). The unique earphone & microphone picks up voice vibrations from the ear canal for the transmit, audio and also provides received audio. Will not interfere with helmets. Built-in antenna gives up to 1/8-mile range, average.

Remote PTT button & channel selector. Uses three "AA" batteries. 5 1/2" w x 3" h x 1" d 6 oz. **\$49⁹⁹**

MX-49HX 5 selectable channels (A, B, C, D & E). Great for motorcycling, snow mobiling, etc. The helmet adaptable headset has a whip antenna and boom microphone with windscreen. VOX or PTT with on-unit or remote switch. Front mounted OFF/ON, volume, VOX sensitivity & channel selector. Jacks for optional passenger intercom headset. Uses three "AA" batteries. 5 1/2" w x 3" h x 1" d, 6 oz **\$49⁹⁹**

**Quirel**

PROCOM

Low Power
VHF & UHF
Handhelds

Ideal for
Short Range
Communications

Recreation • Construction
Factories • Security



Features Include: 10 synthesized programmable channels • Low/Med/High transmit power, 5W full output • Range 1 to 3 miles • Channel LCD digital readout • Channel scan w/channel lockout • Rechargeable nicad battery, AC charger, flexible antenna • Jacks for AC charger, earphone, external speaker/microphone, and external antenna with BNC connector • Optional programmable CTCSS tone squelch • F.C.C. license application included • 4 1/2" h x 2 1/2" w x 1 1/2" d, 15 oz

M-510 VHF model - programmable from 144 to 174MHz **\$269⁹⁹**

MU-510 VHF model - programmable from 144 to 174MHz **\$299⁹⁹**

M-54 Similar features as models above. 5W with four channels. Comes with one channel installed for 151.625MHz. 7" h x 2 1/2" w x 1 1/2" d, 1 lb **\$199⁹⁹**

Toll Free: **1-800-558-0411**



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NEW

X-10 ACTIVEHOME
with the touch of a button control your entire home
EASY TO USE PC-BASED, WIRELESS HOME AUTOMATION SYSTEM.

CONTROL EVERYTHING IN YOUR HOME INCLUDING LIGHTS, APPLIANCES AND HOME THEATER.

See Price List

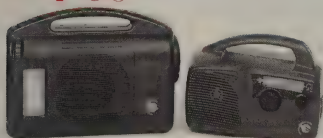
Wireless Home Security

X-10 is a leader in the field of wireless home security and home automation. AES and this industry leader have teamed up to bring you these state-of-the-art products. Protect your family and your electronic equipment! AES has complete systems or you can design your own from the list of X-10 products & accessories.

The home security will monitor doors and motion sensors can cover wide areas in or around your house. You can even have the system call a friend or neighbor if its activated. You can ward off potential problems with the sound of REX. Rex is a fierce sounding electronic barking dog.

Home automation is here now and X-10 provides it! Hot coffee automatically in the morning, turn lights on/off automatically or at the push of one button. Turn the heat up and down. Set it up to run from your PC! & more! **See Price List**

BayGen Freeplay® Radio



Generates its own power – no batteries or external power needed. Perfect for activities, emergencies, power outages. Inside the radio, the unique **Freeplay Generator** (a wind-up B-motor carbon steel spring driving a generator through a transmission) produces the operating voltage. A short wind-up lets you enjoy free listening for up to an hour, depending on model and volume level. Quality sound comes from a 4 inch, silver dome speaker. Built-in ferrite bar and telescoping antennas, external power and headphone jacks.

FPR-2 (right) AM & FM broadcast band coverage, 60 min. operation. 8" h x 11 1/2" w x 8" d, 5 lbs, 5 oz. **\$69⁹⁵**

FPR-1B (left) AM & FM plus 5.8 to 18MHz shortwave coverage, 30 minutes operation. 10" h x 13 1/2" w x 5 1/2" d, 6 lbs, 3 oz. **\$99⁹⁵**

AC ADAPTER for BayGen radios **\$10⁹⁵**
HEADPHONES for BayGen radios **\$14⁹⁵**

Freeplay® Solar Radio

Same features as the FPR-2 above, with the addition of a solar panel that powers the radio when exposed to sunlight.

In direct sunlight the radio will run off of the panel alone; as the sunlight decreases, the radio automatically compensates by drawing from the spring. A clear plastic case shows off the unique construction of the generating mechanism.

FPR2SC \$79⁹⁵ • **FPR2SM** same, gray case **\$79⁹⁵**

uniden Marine

MC-1010 80 channel

Marine VHF Radio

- All USA & International Channels, 10 weather channels • Ultra compact rugged construction • New durable design microphone • Triple watch feature • Memory scan • weather scan • 25 & 1W output • LCD display • Ext. speaker jack • 12V DC @ 4.5A • 6 1/2" w x 4 1/2" d x 2 1/2" h, 1 lb, 12 oz. **\$139⁹⁵**

- MC-1020 80 channel Marine VHF Radio** • All USA & International Channels, 10 weather channels • Ultra compact rugged construction • Quik Command™ microphone with-touch channel 16 & 19 key • Triple watch Plus™ • Memory scan • weather scan & alert • 25 & 1W output • LCD display & dimmer, back lit keypad • Public address • External speaker jack 12V DC @ 5A • 6 1/2" w x 4 1/2" d x 2 1/2" h, 1 lb, 12 oz. **\$159⁹⁵**

MC-535 80 channel

Marine VHF Radio

- All USA & international, 10 weather channels • Instant channel 16 • Memory scan • Dual watch • LED channel display • 25 & 1W output • Weather resistant • Front speaker, ext. speaker jack • 12VDC @ 5A • 6 1/2" w x 7 1/2" d x 2 1/2" h, 2.4 lbs **\$119⁹⁵**



HH-980 Deluxe 90 channel

Marine VHF Handheld

- Microprocessor controlled • All USA & International Channels, 10 weather channels • Weather alert • Front-fire speaker • Watertight • All channel scan • Instant channel 16 • 5/1W-selectable power • Dual watch/Triple watch • LCD channel display • 7.5V @ 850mA from supplied rechargeable Nicad battery pack • 2 1/2" w x 1 1/2" d x 5 1/2" h, 1 lb, 12 oz. **\$209⁹⁵**



HH-940 90 channel

Marine VHF Handheld

- All USA & International Channels, 10 weather channels • All channel scan • Instant channel 16 & 9 • Triple watch • Electronic touch keypad • Backlit LCD display • 1W power output • Weather alert • Flexible rubber antenna • Keypad lockout • Battery charge indicator • Waterproof, lightweight & wearable • Rechargeable battery, drop-in charger • 2 1/2" w x 1 1/2" d x 4 1/2" h, 8.8 oz. **\$159⁹⁵**



HH-955 90 channel

Marine VHF Handheld

- All USA & International Channels, 10 weather channels • Memory scan • Backlit LCD display • Triple watch • Instant channel 16 & 9 • Weather alert 5 & 1W output • Flexible rubber antenna • Keypad lockout • Battery charge indicator • Weather resistant housing • Uses alkaline batteries, or Ni-cad rechargeable battery (not included) • 2 1/2" w x 1 1/2" d x 6 1/2" h, 19.5 oz. **\$129⁹⁵**



ICOM Aircraft

IC-A22

VHF Air Band Transceiver

- Covers (COM) 118-136.975, (NAV) 108-117.95MHz and memory channels • Programmed scan, memory scan and lock • 5W output • Instant 121.5MHz • NAV features: 200 channel VOR nav with CDI, radial heading TO/FROM VOR, Auto Bearing Set • Semi-duplex, combines VOR/COM operation • Includes Ni-cad rechargeable battery and wall charger • 2 1/2" w x 7 3/4" h x 1 1/2" d, 1.4 lbs **\$549⁹⁵**



ICOM Marine

IC-M10A

Miniature Handheld Marine VHF Radio

- Programmable for all USA and International Channels & Weather • Independent Channel 16 • 24 Memories • Full Function & Priority Scanner • Dual/Tri-watch • 3 Watts output • Power-Saver • Large backlit LCD display • CALL key for hailing channels • "AA" Alkaline battery pack provides 2-14 hours operation for each set (Batteries not included). • 2 1/2" w x 1 1/2" d x 4 1/2" h, 12 oz. **\$179⁹⁵**



IC-M710 SSB MARINE Transceivers

Rugged, 150W SSB Transceiver, 1136 channels with 160 user-programmable memories, PC programmable, alpha numeric readout on large LCD.

IC-M710 (04) General version without 2182kHz alarm, marine bands only. Special Order **\$1399⁹⁵**

IC-M710 (05) Open version, covers 1.6 to 27.5 MHz, has 2182kHz alarm Special Order **\$1599⁹⁵**

KENWOOD Marine

TKM-707 SSB Radiotelephone

A high-performance unit designed to meet the stringent demands of marine operation. Utilizes a heavy duty rustproof aluminum chassis and the highest quality parts to maximize performance.

- 150W RF Output Power • 2 MHz to 23 MHz Marine Band Operation with 500kHz to 30 MHz General Coverage receiver • 198 Memory Channels • Multi-Scanning • 2182kHz emergency alarm built-in • Optional Tuner & More!

Special Order – **\$1249⁹⁵**

SHAKESPEARE

Marine Antennas



5202 (A) Collinear-phased 5/8-wave elements. 8 ft. long, 6dB gain, handles 50 Watts. DC grounded. Chrome-plated brass ferrule. Includes 20 ft. of coaxial cable with PL-259 connector.... **\$69⁹⁵**

497 (B) Collinear phase 5/8-wave elements. 8 ft. long, 6 db gain., handles 50W is not DC grounded. Smaller diameter absorbs flex. Includes 20 ft. coaxial cable and PL-259 connector..... **\$49⁹⁵**

5206-C (C) Economy model, 8' long, end fed with 6dB gain. Handles 50 Watts, DC grounded. 15 ft. coaxial cable & PL-259 connector.... **\$39⁹⁵**

420 (D) Center-fed 1/2-wave coaxial sleeve model. 3dB gain, 5 ft. long. Polycarbonate lift-and-lay deck mount with leveling plate, hardware and 20 ft coax cable/connector..... **\$59⁹⁵**

495 (E) Lift-& lay polycarbonate deck mt.... **\$16⁹⁵**

366H (F) Ratchet antenna mount with release handle for deck or bulkhead mounting. Has 9/32" hole for Loran cable. Standard 1"x14 male threads. Chrome plated zamac..... **\$29⁹⁵**

WEATHER • GPS

DAVIS

Gives Wind Direction & Speed, Temperature, Rain & Barometric Trend, Humidity, Dew Point, Alarms. Download and Graph Data on your PC - remote with Modem Interface. Central Junction Box for Easy Hook-up, Modular Design. Perfect for NOAA Weather Monitoring Stations.

Weather Stations



Model 7440 Weather Monitor II

Top-of-the-line Personal Weather Station that combines all the weather monitoring functions and a 12 or 24 hour clock with date, into one package and shows them on an easy-to-read, back lit, 1 1/2" x 4 1/2" LCD display. Temperature: Indoor, from 32°F to 140°F. Wind: Wind Direction in 1° or 10° increments • Speeds to 175 mph • High Wind Speed • Wind Chill to -134°F • Low Wind Chill Barometer: Barometric Pressure (with memory recall) • Trend arrow Humidity: Inside Humidity 10% to 90% (outside optional) • High and low Humidity Alarms: Temperature, Wind Speed, Wind Chill, Humidity, and Time. Barometric trend alarm for change >.02, .04, or .06 inches of mercury in an hour Other Features: Compact, 5 1/4" x 5 1/4" x 3" • Scans selected functions • Metric/U.S. units • AC operation w/batt. back-up • Use on desk, shelf or wall..... **\$349⁹⁵**

Model 7859 External Temperature & Humidity Sensor

For the 7440; measure outside humidity, dew point & temperature. Comes with 40 ft. cable..... **\$109⁹⁵**

Model 7425 Weather Wizard III

Monitor both Indoor and Outdoor weather conditions at the touch of a button on the 1 1/2" x 4 1/2" LCD display. With the optional Rain Collector, measure daily and accumulated rainfall. Optional WeatherLink software will process and store weather data through an IBM compatible PC or Macintosh.

With anemometer, external temperature sensor, junction box, cables & AC adapter. Temperature: Indoor, 32°F to 140°F • Outdoor, -50°F to 140°F • High and Low Temperature Wind: Direction in 1° or 10° increments • Speeds to 175 mph • High Wind Speed • Wind Chill to -134°F • Low Wind Chill Alarms: Temperature • Wind Speed • Wind Chill • Time. Other: Compact, just 5 1/4" x 5 1/4" x 3" • Scans selected functions • Metric or U.S. units • AC operation with back-up • Desk, shelf or wall mount..... **\$169⁹⁵**

Model 7415 Weather Wizard II

Like Weather Wizard III, but does not show Wind Direction, and the LCD display is smaller..... **\$129⁹⁵**

Model 7852 Rain Collector II

For 7440, 7425 & 7415; read both daily & accumulated rainfall in 0.01" increments. Comes with 40ft cable..... **\$69⁹⁵**

Model 7400 Perception II

Monitors indoor climate, looks similar to Weather Wizard III. Functions: Temperature 32°F-140°F • High/Low Temperature • Barometric Pressure w/Memory Recall • Humidity • Highs & Lows recorded with time & date • Alarms: Temperature, Humidity, Time, Barometric Change >.02, .04, or .06 inches of Hg/hr • 12/24 hr clock w/date • Backlit display **\$129⁹⁵**

Model 7876 4-conductor, for anemometer, ext. temperature sensor, rain collector, or WeatherLink.

\$18⁹⁵

Model 7878 6-conductor, for use with the external temperature and humidity Sensors, only.....

\$22⁹⁵

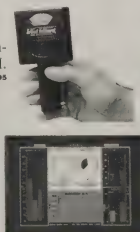
Model 0281 Wind Wizard™

Wind Speed Indicator Handheld unit accurately measures wind speed from 0-60 MPH. No batteries required..... **\$44⁹⁵**

WEATHERLINK® 4

Software for Windows Link Perception, Weather Wizard, or Weather Monitor to your computer. Create graphs, calculate average conditions, generate summaries, analyze trends, more.

See DAVIS in the Price List



MAGELLAN Navigation & Communications

Global Positioning Satellite (GPS) brings Satellite Navigation within reach of everyone! For navigation, hunting, etc. - tells you where you are, and how to get back.

Each Magellan GPS includes a powerful 12 parallel channel receiver, wraparound rubber armoring, "EZstart" operation, auto averaging and a water-proof design.

GPS-2000XL Offers amazingly fast satellite acquisition and tight satellite lock under the toughest conditions. Other features include • 24 continuous hours on 4 "AA" batteries • 7 navigation screens, two customizable • scratch-proof display • shock-resistant • 200 landmarks • Message attachment to landmarks • 5 routes with 20 reversible legs • Backtrack feature • Real-time track plotter • Sunrise/set & lunar phase calculations • Re-settable trip odometer • Landmark projection • Upload/download capability, NMEA output • Latitude/longitude, UTM, OSGB, MGRS, TD's, Finnish, Irish, Swedish & Swiss grid coordinates systems • Max. Speed: 950 mph • DGPS ready • Simulator program for training • Size: 6.6" x 2.3" x 1.3" • Weight: 10 oz. Comes with lanyard strap, User & Quick reference guides..... **\$149⁹⁵**

GPS Tracker Eight customizable navigation screens on a high-resolution display, 128 x 64 pixels • 30 hours of continuous battery life • 10-year internal lithium battery backup • Detachable super sensitive antenna for superior tracking • Built-in thermometer • Stores up to 500 user-entered locations & 20 reversible routes with 30 legs • 1200-point Smart Track • BackTrack with save as route option • Northfinder™ displays sun & moon positions, quickly determine desired direction • Comes with wrist strap, 4 "AA" batteries, and User & Quick reference guides..... **\$229⁹⁵**

GPS ColorTRAK Featuring the world's first high-resolution, color display in a portable GPS receiver, 128 x 64 pixels • Outstanding lock-on tracking • 8 graphic navigation screens including real-time multiple route plotter w/adjustable scale • Detachable super sensitive antenna for superior tracking • 30 hours of continuous battery life • Backlit display & keypad • 10-year lithium back-up battery • Stores up to 500 user-entered locations & 20 reversible routes with 30 legs • Comes with carrying case, wrist strap, 4 AA batteries, and User & Quick reference guides..... **\$279⁹⁵**

Pioneer The first GPS under \$100 Super sensitive antenna • Tracks 12 satellites • Displays distance, bearing, heading, direction, steering, speed, time to go, elevation, XTE, time & satellite elevations • Dedicated GOTO, NAV, MARK, MENU & LIGHT keys • 100 landmarks • 1 route, 10 legs • 3 graphic navigation screens • 11 map datums • Backlit display • Wrap around rubber armoring - rugged, water proof • 24 hour battery life • Pocket-sized 6.25" h x 2.2" w x 1.1" d, 6.8 oz..... **\$99⁹⁵**

GPS Map 'N' Track CD Includes: **GPS Link 3.0** - Land mapping software links to a GPS • **Trip planner** - plan your trip using GPS link maps; upload information and your GPS will direct you • **In-vehicle system** - connect your GPS to a laptop, track where you are on the map • **Trip recorder** - use GPS to record your track, download information and view path of travel on a digital map.

DataTrack - GPS position & route data management software • Save and store more locations and routes. • Quickly & easily edit and review saved locations and routes. • Create new locations, plot your trip for future reference. **Precision Mapping Streets 3.0** - Land mapping software that creates custom maps. • Find any place in the US. • The most current and accurate information for most US streets • Create custom maps, over 100 drawing tools. Specify: GPS Map 'N' Track CD w/PC interface module & 110V AC adapter or with PC interface cable, only... **00-19065-000 \$99⁹⁵**



See Price List for selection of Magellan & Garmin Accessories

GARMIN

Garmin's Personal Navigator GPS receivers are low-cost and full-featured. This family of satellite navigation equipment can guide you anywhere you want to go.



GPS-12XL Powerful 12 channel receiver for fast, accurate positioning. Designed for boaters, hunters and hikers who use a GPS in the most challenging environments.

• PhaseTrac 12 parallel channel receiver for fast position fixes in the toughest conditions including tree canopy & urban obstructions • Rugged, compact case that meets military 810(e) specs • External antenna, internal beeper alarm • 500 user waypoints with alphanumeric name and user comments • 20 reversible routes of up to 30 waypoints each • TrackBack navigation automatically turns your track log into a route back home • 9 proximity waypoint alarms • Over 1000 track log points position averaging, emergency erase, and cloning features • Up to 12 hours battery life on four AA batteries (not supplied)..... **\$269⁹⁵**



StreetPilot Dashboard Mount GPS Receiver Portable, 12 parallel channels • Built-in map of the Americas with state/country boundaries; lakes; rivers; cities; U.S. state, and interstate highways & some local thoroughfares • Accepts GARMIN cartridges showing residential streets, addresses & points of interest • Large high-res 240 x 160 pixel display • Three-level bright amber backlit screen & keypad • Automatic turn by turn guidance with manual route selections • Automatic waypoint and route naming • Storage for 100 waypoints (not including points of interest) • Trip planning and computer • Zoom key - 120 ft. to 800-mile range • Dashboard screen showing current trip segment, distance, direction • Clock alarm, arrival alarm • Six "AA" batteries - up to 16 hours of use, lithium back-up... **\$549⁹⁵**



GPS-III Features road maps - without plug-in cartridges. State-of-the-art two-way screen display for vertical or horizontal orientation. Dedicated zoom keys, diagonal panning, auto start/stop trip timer, average & maximum speed recordings.

• Operating system continuously tracks up to 12 satellites • Rocker keypad, backlit LCD display, full featured moving map plotting • Dedicated keys for zooming from 0.2-360 miles • User selectable navigation screens for compass or graphic highway steering guidance • Two-way screen flips horizontal or vertical with push of a button..... **\$369⁹⁵**



DeLORME Tripmate Satellite Navigator

Tripmate is a high-performance, easy-to-use link to the Global Positioning System (GPS). Tripmate and a portable PC will show your location on detailed Street Atlas USA 4.0 maps - anywhere in the United States!

The included map software in addition to being the most detailed and accurate, allows you to create maps for any occasion - insert symbols and notes, draw lines and polygons. Measure distances and areas. Import & locate contact manager listings. Get ZIP Code demographics, boundaries. Unique Internet, GPS links. CD-ROM.

If your portable PC has a CD-ROM drive, you can plug Tripmate into the serial port. If not, use a desktop PC to select the area of interest and download it to your portable..... **DEL TRIPMATE \$149⁹⁵**

GENERAL

"Welcome to Amateur Radio" Primer

Know someone looking for a hobby where you can have fun communicating locally or around the world through satellites for free? Learn if amateur radio could be for you with this 26 page booklet **KENPRIMER \$0¢**



1998 Radio Amateur's Handbook, 75th edition

1200 pages of basic and advanced radio theory. Plenty of how-to information and illustrations. Software can be downloaded from the ARRL Webv site or the League's HiramBBS **ARR100 \$32**

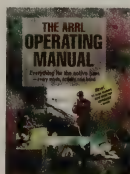
1998 Radio Amateur's Handbook CD 2.0

Complete text of the 1998 ARRL Handbook - every word, every page.

- An enhanced image viewer with an auto-sizing feature and a thumbnail print preview that allows easy page adjustments.
- The Handbook template packages are now included as Adobe Portable Document Format files, and a copy of Adobe's Acrobat Reader 3.0 is included on the CD-ROM to allow you to view and print the template packages.
- An enhanced word index with a "Search the Index" feature that allows you to type in a word and see the matching words as you type.
- World Wide Web URLs in the text are now hotspots that you can click to launch your Web browser and view the contents of the URL.
- Microsoft Windows required **ARR103 \$49⁹⁵**

Operating Manual

The best one-stop book of operating information that is available **ARR240 \$25**



Now You're Talking

This book has been used by 1000s of hams to study for the first license level exam. Updated July 1997 **ARR236 \$19**



Hints and Kinks (vol 1)

Want to improve your station's performance or solve a problem? This is the book! ... **ARR185 \$10**

Hints and Kinks (vol 2) ARR186 \$12

QRP Power

Learn about low power transverter design, transceivers, transmitters and more **ARR256 \$12**

Log Book

This universal log suits all amateur radio operations, DXing contests, rag-chewing **ARR200 \$4**

Grid Locator Atlas

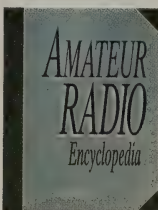
A must have for all contesters **ARR180 \$5**

FCC Rule Book

Complete guide to all FCC regulations pertaining to amateur radio **ARR160 \$12**

ARRL RF Exposure and You

Explains how to meet the FCC requirements using tables, graphs & worksheets to guide you through the process. If it turns out you aren't meeting new requirements, this book suggests what to do **ARR258 \$15**



Amateur Radio Encyclopedia

Packed with nearly 600 pages of alphabetically arranged articles on more than 1000 topics. This book offers fast, easy access to information on every aspect of ham and hobby radio **TAB640967 \$29⁹⁵**

CQ Ham Radio Calendars

15 months of pictures taken by professionals and loaded with helpful information. Includes contest dates, moon phases, meteor showers and holidays. Enjoy 15 months of use, January 1998 thru March 1999.

The Classics Calendar is full of beautifully photographed vintage ham equipment. Each month you'll reminisce about radio history including Johnson, National, Gonset, Collins and more.

The Amateur Calendar has wonderful color photos of stations, antennas and well-known Amateur Radio personalities. You'll see everything from exotic moonbounce arrays to a classic '50s station.

Classics Calendar **CQX1998RADCLCAL \$9⁹⁵**

Amateur Calendar **CQX1998AMRADCAL \$9⁹⁵**

Ham Radio Made Easy

Practical advice you can use right away. Gets you on the air quickly and painlessly whether you're into repeaters, packet or anything else **ARR182 \$15⁹⁵**



1998 Radio Amateur Callbook CD-ROM

Access Callsigns, Names & Addresses of more than 1.5 million listings world-wide cover-

ing more than 250 countries, islands and dependencies. Includes North American & International listings.

FEATURES

- Brand new amateur radio prefix maps
- Includes country names, date of birth
- QSL manager listings
- Print program w/multiple entries to customize a mailing label or logging format; contesters can record callsigns & print custom fields for labels or QSL addressing.
- Windows/DOS platform for US & International data retrieval
- Windows icon driven by mouse/DOS via menu
- Data display by callsign, last name, city, license class issue & expiration date
- Morse code sound output to PC speaker
- Search U.S. stations by callsign, last name, county, city & zip
- Search International data by callsign
- Search by name, street, city, province or region
- Search clubs, then & now, military & silent keys
- US data includes time zones, latitude/longitude & area codes **RACRACDOS \$49⁹⁵**

Understanding Basic Electronics

For beginners & those who want to brush up on electronic principles. Clear, simple explanations and loaded with illustrations **ARR328 \$20**



SEQUOIA Pocket REF

544 Pages! Chapters on air and gas, carpentry, chemistry, computers, electricity, math, hardware, plumbing, steel and materials surveying, welding, general information and more. Hundreds of tables and charts, Thousands of conversions. Everything you need to know! **\$9⁹⁵**

Buckmaster HamCall CD-ROM for MAC and IBM PC Compatibles

Look up over a million listings by Call, Name, Address, City, Zip, Call sign suffix, country and now soundex last name searching. Plus, license issue date, expiration, birth date, previous call, area code, e-mail address, previous class, latitude, longitude, grid square, county and time zone. Retrieve by Callsign, Name & zipcode on Macintosh.

Other features:

- Windows 95 Compatible
- Extensive international listings
- Print standard 1-up labels
- Hundreds of programs & data files of ham related subjects
- Interfaces with many popular logging programs
- Photos added to license info **BUCHAMCALL \$50**



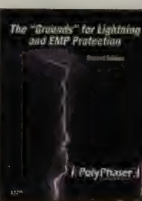
Walnutcreek QRZ! Ham Radio CD • v 10

Brings over 1,000,000 callsigns from stations around the world to your fingertips. This edition lists several new countries including: Egypt, India, Malta, Namibia, New Zealand and Pakistan.

- Includes the latest FCC Listings
- Over 1,000,000 callsigns
- Internet E-mail addresses of over 95,000 hams
- Over 1,600 Amateur Radio Shareware Programs
- Morse code training software
- Radio & scanner MODS
- On-line FCC exam training software
- Computer radio control programs
- Over 1,500 digital QSL cards w/built-in viewer
- Supported by most logging & contest programs
- Compatible: Windows95/NT, Windows3.11, MS-DOS, OS2, Linux, & most UNIX **WALHAMQRZ \$29⁹⁵**

CQ Getting Started in Ham Radio

This is a fast-paced video introduction to the fascinating world of ham radio. CQ's experts show how to select equipment and antennas; which bands to use; how to use repeater stations for improved VHF coverage; the importance of grounding and the basics of soldering. Get the most out of your station, whether it's home-based, mobile or hand-held. **CQHAMVIDEO \$19⁹⁵**



The "Grounds" for Lightning and EMP Protection

Written in a non-technical manner so anyone can understand and install appropriate protection /ground systems to guard their communications equipment against adverse pulses **PLYGLEP \$22⁹⁵**

STUDY GUIDES



General Class License Manual

All the study material you need to take the test. Good through 6/30/98..... **ARR170 \$12**

Advanced Class License Manual

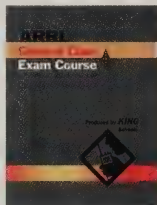
Everything you need to pass the test. Good through 6/30/99..... **ARR120 \$12**

Extra Class License Manual

Complete source for test material. Good through 6/30/00..... **ARR156 \$12**

ARRL Ham Radio License Exam Course Series

Learn the information needed to pass Technician, General, Advanced and Extra Class licensing exams using text, videos & review guides..... **See Price List**



The Gordon West book series include test questions, answers, charts, diagrams & explanations of correct answers.



No-code Plus

GWTM..... **\$12⁹⁵**

General

GWGM..... **\$9⁹⁵**

Advanced

GWAM..... **\$11⁹⁵**

Extra Class

GWEM..... **\$11⁹⁵**

World's Best Selling W5YI Amateur Radio License Computer-aided Instruction Software

Learn at your IBM/compatible PC! Nine 3½" and 5¼" disks cover all written and Morse code exams — Novice through Extra. Review all 2,000 questions, take sample exams, learn Morse code, build telegraphy speed and more! Free Bonus — Complete Part 97 FCC Rule Book.

No Code License..... **NCS \$29⁹⁵**

No Code thru Extra Class License..... **HOS \$39⁹⁵**

Tech, Tech Plus, General License..... **TPC \$49⁹⁵**

General Class Upgrade..... **GUS \$29⁹⁵**



Kenwood EZ-PASS No-Code Tech Study Guide

Make a Personnel Connection provides a great method of learning about Amateur Radio. Works with Windows 3.1 and 95, the package provides test questions for both the Novice and Technician class FCC licenses. The Windows 95 version provides full graphics. The package uses the "Welcome to Amateur Radio" primer along with the most comprehensive full color Amateur Band Charts available. Includes a reward certificate redeemable to Kenwood for \$10 when you purchase a Kenwood radio as your first rig..... **KENEZPASSWIN95 \$34⁹⁵**

Diamond Systems Amateur Radio License Study Courses for IBM PC/XT/AT and "look-alikes" using PC/MS DOS

Prep material for Amateur Licenses Novice through Extra class and No-Code Technician! The Software includes complete FCC VEC questions, all sub elements, generates 1000's of practice tests, keeps score, plus a code teaching program.

Novice class..... **DSI-IBM-N \$39⁹⁵**

Technician class..... **DSI-IBM-T \$34⁹⁵**

No Code Tech..... **DSI-IBM-NC \$49⁹⁵**

General class..... **DSI-IBM-G \$34⁹⁵**

Advanced class..... **DSI-IBM-A \$49⁹⁵**

Extra class..... **DSI-IBM-E \$49⁹⁵**



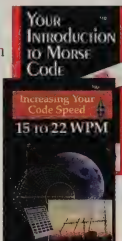
No Code Technician Amateur Radio Licensing Seminar

Updated Version! Now you can easily become a licensed ham operator without learning the Morse Code. Easy-to-follow training course teaches what you need to know to get your Technician ticket. 88 min..... **WSYNVCP \$31⁹⁵**

Your Introduction to Morse Code and Increasing Your Speed Series

This cassette tape series from ARRL will teach you to copy Morse code so you're able to pass the Novice or Technician Plus class license, plus help you increase your speed up to 22wpm.

The first tapes include plain-language practice text and practice Morse code exams using the format of a typical amateur Morse code contact. The rest of the series contains Morse code practise in graduated steps from 5 to 22wpm..... **SEE PRICE LIST**



Theory Tapes by Gordon West, WB6NOA

Novice Written Theory, 2 tape set..... **GWNW \$9⁹⁵**

Tech Written Theory, 2 tape set..... **GWTV \$9⁹⁵**

General Written Theory, 2 tape set..... **GWGW \$9⁹⁵**

Adv Written Theory, 4 tape set..... **GWAW \$19⁹⁵**

Extra Written Theory, 4 tape set..... **GWEX \$19⁹⁵**

Morse Code Test Preparation

Code Teacher 0-5 wpm..... **GWNT \$9⁹⁵**

General Class Code, 3-15 wpm..... **GWGT \$9⁹⁵**

Extra Class Code, 12-21 wpm..... **GWET \$9⁹⁵**

Radiotelegraph Training Courses

Each has 6-tape course prepares you to pass Novice, General or Extra Class exams • "Gordo" voice Instructions • Rapid Farnsworth Method • Plain Language & Random • Lots of Humor!

For Beginners, 0-7 wpm..... **GWN6 \$29⁹⁵**

For Speed Building, 5-16 wpm..... **GWG6 \$29⁹⁵**

For Adv Telegraphers, 10-28 wpm..... **GWG6 \$29⁹⁵**

SPECIAL INTEREST



Practical Packet Radio

Everything you need to know including setting up a station, getting on the DX packet cluster & more..... **ARR253 \$15⁹⁵**

Personal Computers in the Ham Shack

Covers every ham application of the personal computer: databases, station control, contesting and logging, and much more..... **ARR248 \$15⁹⁵**



CQ Getting Started in Packet Radio

Help de-mystify the exciting, but sometimes confusing, world of packet radio. Learn how to get started using your computer on the radio. Included are step-by-step instructions on making packet contacts and using packet bulletin boards, networks & satellites..... **CQXPACKETVIDEO \$19⁹⁵**

SEQUOIA Pocket PC REF

Hard to find information on IBM PC's - ASCII codes; numeric prefixes; video standards; decimal/hex conversions; printer codes; PC error codes; I/O pinouts; PC memory maps; address maps; modem commands & switch settings; scan codes; floppy drive types; CPU types; DOS history..... **SEQPOCKETPCREF \$14⁹⁵**



Your Packet Companion

A great first book for answering your packet questions.. **ARR358 \$8**

Kantronics G-TOR™ Book

A collection of previously-published articles, a detailed description of the G-TOR protocol & numerous information charts..... **KANGTORBOOK \$14⁹⁵**

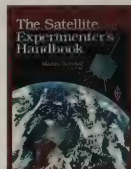


Getting On Track With APRS

A hands-on guide to installing and using new map-based tracking systems..... **ARR175 \$14⁹⁵**

Satellite Experimenter's Handbook

A wealth of knowledge on amateur, weather, TV broadcast or other spacecraft.... **ARR280 \$20**



Satellite Anthology, 4th Edition

A compilation of QST articles dealing w/satellites like Amsat-Oscars 10 & 13, Russian RS series & Microsats..... **ARR276 \$12**

Getting Started in Amateur Satellites

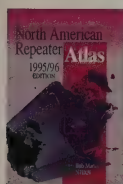
Learn with this video how veteran operators set up their satellite stations. Find out how to locate and track ham satellites with ease. Watch as operators access current satellites & contact far ranging countries around the world. This video is filled w/easy to understand advise/tips that can't be found anywhere else **CQXHAMSATVIDEO \$19⁹⁵**



Passport to Worldband Radio

1998 SW listening guide containing data on every international broadcast station; names, locations, frequencies, times, coverage, target area, transmit power & more... **ARR247 \$19⁹⁵**





North American Repeater Atlas
Repeater maps for all 50 states, Canadian provinces, Mexico, Central America and the Caribbean **ARR225 \$10**

1998-99 Repeater Directory

More than 20,000 listings for voice and digital repeaters and propagation beacons located in North, Central and South America. Lists more than 500 beacons from 14 to 24 GHz, band plans, tone chart, committees, clubs & more! **ARR272 \$8**



ARRL TravelPlus for Repeaters™ CD-ROM

A product enabling you to locate repeaters along any travel route and access repeater data in ways you never thought possible. Quickly find all the info you need to pre-program your rig or take along a sequential list of repeaters for your

entire trip. If you can point and click a mouse on an IBM-compatible, you can:

- Trace a route and find all repeaters within a specified range on whatever bands you select.
- Identify all repeaters up to 500 miles of any location.
- Print map screens or repeater lists based on your travel route. Choose maps that display major highways and cities in the US and Canada, or more detailed maps in the US.
- Customize repeater info to your needs. Find repeaters for selected bands; select repeaters only for certain regions; locate open repeaters & those with autopatch capability; sort alphabetically by state, region and location; sort by frequency in ascending or descending order; sort in reverse sequence order for your return trip. Includes the entire ARRL VHF/UHF Repeater DataSource.
- Save route files & repeater list files to disk for future reference or for linking routes from one map set to another..... **ARR322 \$39⁹⁵**

CQ Getting Started in DXing

Top DXers share their experience with equipment, antennas, operating skills and QSLing. You'll see hams work rare DX around the world. If you're new to DXing, this video is for you! All this valuable information may well give you the competitive edge you need to master the world of DXing..... **CQDXINGVIDEO \$19⁹⁵**

SPECTRUM FCC Database CD ROM

A nationwide frequency database with over 3 million records. The data includes: frequency, call sign, class of station code, radio service code, company name, transmitter city/county/state/latitude & longitude, & number of units for vehicle, marine, aircraft, portable, & pagers. Records for police, hospitals, fire, state & local governments, businesses, airlines, theme parks & more. Six different searches. IBM compatible; Macintosh OS 7 or higher.

PECSPECTRUM Special w/Radio Purchase \$19⁹⁵



Monitor America

Third edition, 1108 pages. A complete listing of public safety and business radio communications of almost every community in the nation. Includes maps, tone codes & repeater input & output frequencies. Listings of AM and FM radio stations with frequencies and formats. Race car teams, special sections of Disney & other spots. **MONMONITORAMERI \$29⁹⁵**

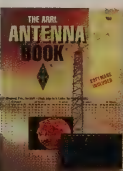
CQ Getting Started in Contesting

For the newcomer to contesting or an experienced veteran, this video is for you! You'll get advice and operating tips from some of contesting's most successful competitors, including Ken Wolff, K1EA; Dick Newell, AK1A; and CQ's own contest columnist, John Dorr, K1AR. You'll see what contesting is all about, explanations of contest jargon, tips for beginners, how to compete from a small station, operating secrets from the "pros", live QSOs from world-class stations and VHF/UHF contesting... **CQXCONTESTVIDEO \$19⁹⁵**

CQ Getting Started in VHF

This is the ideal introduction to VHF. See demonstrations of the latest radios. Also, learn about repeater usage as well as the more exotic VHF operating modes. Whether you are interested in packet radio, satellite operation or simply using your local repeater..... **CQXVHFVIDEO \$19⁹⁵**

ANTENNAS

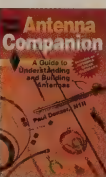


Antenna Book w/IBM software

This one book covers all aspects of design, theory and construction. With software for design, propagation forecasting and much more..... **ARR126 \$30**

Antenna Compendium V with software

Baluns, HF beams, yagis and quads are just some of the subjects covered. Includes IBM software for plotting antenna model data files & more **ARR139 \$20**



Your Ham Antenna Companion

A guide to understanding and building antennas. Includes glossary of terms..... **ARR357 \$10**

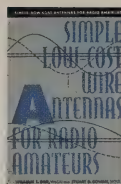
W6SAI HF Antenna Handbook

Lots of inexpensive, practical projects that work. A great guide for construction of loop, yagi & verticals..... **CQXW6SAIHANT \$19⁹⁵**



All About Vertical Antennas

This book is the product of over sixty years of experimenting with vertical antennas and designs. Formulas, charts, graphs, more.. **RAC087107 \$13⁹⁵**



Simple Low Cost Wire Antennas

This book shows you how to build an efficient antenna at a minimum cost.. **RAC87077 \$13⁹⁵**

Cubical Quad Antennas

The story of the cubical quad, characteristics, how they work, construction, tuning and adjustment & more .. **RAC087034 \$13⁹⁵**

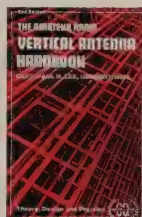


Interference Handbook

How to locate & cure every aspect of radio frequency interference including TV, stereo, radio & telephone **RAC087093 \$13⁹⁵**

The Amateur Radio Vertical Antenna Handbook

The vertical antenna may be just the solution for your area's conditions. Covering all aspects of vertical antenna theory & design, this belongs on the serious amateur's bookshelf **CQXVERTICALBOOK \$9⁹⁵**

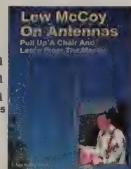


Antenna Impedance Matching

Use the Smith Chart to develop even the most complex matching network to maximize antenna effectiveness by minimizing feed line losses..... **ARR140 \$20**

McCoy on Antennas

Pull up a chair and learn from the master! Loaded with antenna projects for the novice through extra class **CQXLEWMCCOY \$15⁹⁵**



Walnut Creek CD-ROM — Antennas

The 2000+ files on this CD cover 50 different types of antennas including all of the common dipole, vertical Yagi and Quad variations, plus less common types like horns, parabolas, corner reflectors and others. Other features are:

- Design programs to secure desired performance at specified frequencies.
- Three powerful analysis programs - NEC, MiniMec and ThinWire.
- Reference design & application data on masts, towers, elements, wire and anchors.
- Extensive collection of antenna related public domain programs.
- Historical write-ups and bibliographies for additional data and programs.

Plus, get articles w/over 100 illus. on aspects of antenna design & use..... **WALANTENNAS \$29⁹⁵**

PERIODICALS



ARRL Periodicals on CD-ROM

Complete text and illustrations for all articles in QST, QEX and NCJ for a full year. This CD-ROM includes:

- A powerful search engine
- Tools to create bookmarks

• Nearly 1,000 ad images
• Web browser support
• Windows printing and clipboard support
You can find information quickly by entering article titles, call signs, names, keywords or just click on "hotspots" to use your existing browser to reference Web site.
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Back issues of QST available in full years on CD-ROM. Every page (articles, ads, covers) is stored as a black-and-white image that can be read or printed. Easy to use software allows you to:

- Search for articles by title and author
 - Select specific year and issue
 - Browse individual articles and columns
- For Microsoft Windows™ 3.1 or higher. Years—1970-74, 75-79, 80-84, 85-89 or 90-94..... **\$39⁹⁵**



Find more Educational Materials in the Price List under: ARRL • ARTSCI CQ • Cambridge • Grove • Monitor America • Polyphaser • Radio Amateur Callbook • WSYI

Bob Heil "Live" Then and Now (CD) — \$15⁹⁵

Bob Heil, K9EID — active Ham and owner of Heil Sound, began his theatre organ career playing at as a protégé of Stan Kann in 1956. His unique style comes from years of listening to Masters: Stan, George Wright, Raymond Shelley & Jesse Crawford. He played professionally from 1959 thru 1966, then his organ career then remained dormant for 29 years while he pursued other interests. It was rekindled in 1997 by Richard Wright's restoration of the big theatre organ in the Lincoln Theatre in Belleville, IL. This special CD brings his professional career together with his renewed passion for theatre organ.

To own a copy of Bob Heil "Live", order directly from:

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5800 N. Illinois • Fairview Heights, IL 62208-3505
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TECHNICIAN • GENERAL • ADVANCED

With Software only \$129!

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ACCESSORIES BOOKS CODE COURSES



PT-3

Preamplifier
Covers 160 thru 6 meters, useable with either a receiver or transceiver. Tunable low noise dual-gate FET circuit provides >20dB gain with low noise figure & improved spurious and image rejection. RF sensed switch with variable delay automatically bypasses to the antenna on transmit. Second receiver or antenna capability. 12V DC. or use P-12T AC adapter (**\$99⁹⁵**) 2½" h x 8" w x 6" d..... **\$124⁹⁵**



TPA Tunable Preamplifier & Active Antenna
Use as a preamplifier to improve the gain of a receiver, or as an indoor active antenna. Covers 0.22 to 30MHz in 5 bands. A dual-gate FET device provides an excellent noise figure and over 20 dB gain. As a preamplifier, the input matches most antennas; long wire, 300Ω and random lengths. When no external antenna is available, the preamplifier's built-in 30' collapsible whip gives great results. Uses 9V battery or PT-9T AC adapter (**\$99⁹⁵**). 1½" h x 8" w x 6" d..... **\$76⁹⁵**



High Pass Filters
Stop TV, FM & VCR interference caused by harmonics or overload from HF amateur radio transmissions, etc. Installs at TV or VCR antenna terminal or connector. Sharp frequency cutoff at 52MHz with 70dB attenuation below 50MHz.

HP-300T (300Ω) or **HP-75T** (75Ω)ea. **\$12⁹⁵**



OCM-2 Combination Code Practice Oscillator & CW Monitor
Volume control, 3" speaker, and headphone terminals. Requires a code key and a 9V battery.

Kit \$19⁹⁵ • Wired \$24⁹⁵

K-1 Low-cost general purpose key with phenolic base, adjustable tension and contact spacing..... **\$10⁹⁵**

K-4 Deluxe high quality key. Polished brass base, shorting bar..... **\$16⁹⁵**



FCC Test Manuals
New revised editions incorporating all of the latest changes in the FCC amateur radio test preparation requirements.

Separate manuals are available for all license classes including the No-Code Technician. All current FCC examination questions for each class, with corresponding multiple choice answers.

107-PC-2 The complete Morse Code Instructor for IBM PC/XT/AT or compatible. Menu driven—over 18 options, on-line "help" screens. Generates random characters, numbers, punctuation & QSO's. Similar to FCC/VEC exams ideal for the beginner..... **\$29⁹⁵**



More AMECO Products - See Price List & Index



MFJ

422D Keyer-Paddle Combo
Keyer unit installs on top of a Benchner Iambic Paddle. If you already have the paddle, buy just the keyer unit. Uses Curtis™ keyer chip. Speed is 9–50 wpm. Adjustable weight & tone, dot-dash memories & sidetone. Semi-automatic & tune or automatic modes. Keys grid block, cathode or solid state. Uses 9V battery or AC adapter. 4½" x 2½" x 5½" d..... **\$134⁹⁵**

422DX Keyer only..... **\$79⁹⁵**

407C Deluxe Electronic Keyer

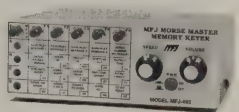
Features dot-dash memories, self-completing dots and dashes; jam-proof spacing. RF proof, instant start. Single squeeze, or straight key. Front panel controls: speed, weight, tone and volume, ON/OFF, tune, auto/semi-automatic. Selectable A or B-type iambic keying. Built-in speaker, uses 9V battery, or MFJ-1305 AC adapter. 7" x 2" x 6" d..... **\$69⁹⁵**



401C Econo Electronic Keyer II Similar to MFJ-407C but with external speed and volume controls, internal weight and tune controls. Uses 9V battery or MFJ AC adapter..... **\$49⁹⁵**

492 Menu Driven Memory Keyer

No keypad or complex sequences to remember. Save & play messages; decrement serial #s; set speed, weight, sidetone; enter iambic, semi-auto, handkey, message queue, paddle command modes; turn on/off sidetone; transmitter tune; keying output on/off; select iambic A or B; reverse paddle; Morse trainer; store starting serial number. Holds 192 characters in 4 soft-sectored message memories, expandable to over 8K characters in 8 memories. Lithium battery back-up. Front panel controls for speed (5–100 WPM) & volume, built-in sidetone speaker. Direct or grid block keying output. Uses 9V battery or 110V AC adapter. 6½" x 2½" x 6¼" d..... **\$89⁹⁵**



493 All features of the MFJ-492, but with 32K memory. IBM keyboard input, serial port for computer interface and QSO simulator..... **\$129⁹⁵**

451 Morse Keyboard A stand-alone CW keyboard with 200 character type-ahead buffer, and two 100 character messages. Requires 12VDC or MFJ-1312B 110VAC adapter..... **\$89⁹⁵**

452 Morse Keyboard with 16 character LCD display. Comes with keyboard..... **\$119⁹⁵**

MFJ on the Web: www.mfjenterprises.com

BENCHER, INC.



"R" HAND MORSE KEYS: A superb and responsive instrument which will bring new pleasure to traditional Morse keying. Features include oil impregnated sintered bearings at pivot points to impart friction-free pivoting and wobble-free vertical tracking. Stainless steel locking screw allows individual adjustment for arm height, tension and contact spacing. Black "Navy" style knob with removable skirt gives a solid feel with outstanding tactile feedback. Heavy metal base available in black texture or chrome finish with anti-skid rubber feet.

RJ-1 Black base **\$89⁹⁵ • RJ-2** Chrome base **\$99⁹⁵**

VIBROPLEX™



The Original "Bug" – first patented in 1904, the Original is still manufactured today using tools and dies similar to those used by its inventor, Horace G. Martin. Designed for code speeds of 20 wpm on low side to 50+ wpm on high side. **Standard** model has painted base and chrome top parts. **Deluxe** model has polished chrome base and top parts with fine jewel movements for smooth operation. **Presentation** model has polished chrome base with 24K gold-plated base plate and chrome top parts. Gold model has gold-plated base with chrome top parts.

Standard (#110) **\$159⁹⁵ • Deluxe** (#105) **\$199⁹⁵**

Presentation (#100) **\$269⁹⁵ • Gold** (#090) **\$299⁹⁵**

Vibrokeyers Single lever paddle

(top) initiates the automatic dots and dashes of an electronic keyer. **Iambic** paddle allows automatic dot & dash insertion. **Standard:** black base, chrome parts; **Deluxe:** chrome base and top parts with jeweled movements; **Presentation:** (iambic only) 24K gold-plated base and top parts with jeweled movements; **Gold:** 24K gold-plated base and top parts with jeweled movements.

Vibrokeyer: Standard (#120) **\$139⁹⁵**

Deluxe (#115) **\$179⁹⁵ • Gold** (#113) **\$269⁹⁵**

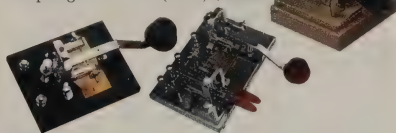
Iambic: Standard (#135) **\$139⁹⁵**

Deluxe (#130) **\$179⁹⁵ • Presentation** (#125) **\$239⁹⁵**

Gold (#123) **\$269⁹⁵**

Brass Racer Iambic Solid brass iambic paddle mounted on a polished hardwood base.. (#145) **\$99⁹⁵**

Square Brass Racer Solid lacquered brass iambic paddle on a polished hardwood base. Magnetic action, no springs..... (#150) **\$139⁹⁵**



Straight Keys: Unique mechanical action, unlike any straight key ever manufactured.

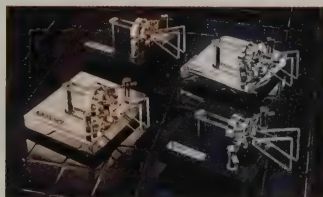
Standard (#155) **\$139⁹⁵ • Deluxe** (#160) **\$179⁹⁵**

Gold (#153) **\$269⁹⁵**

Double Keys: Choice of Iambic & Straight Key or Vibrokeyer & Straight Key. Double keys allow you to instantly switch from using an electronic keyer to the personal touch of a Straight Key.

Straight key/Iambic (#165) **\$319⁹⁵**

Straight key/Vibrokeyer (#170) **\$319⁹⁵**

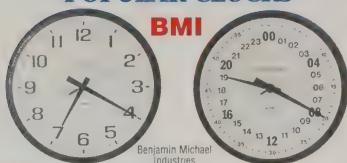


IAMBIIC & SINGLE LEVEL PADDLES: The highest quality, offering precise control, reliability and years of trouble-free operations. Wide-range adjustment of tension and contact point spacing. Self adjusting needle bearings, gold-plated solid silver contact points, and polished acrylic plastic paddles. The Main frame, contact post, spring posts and bearing ring are all precision machined from solid brass, then chrome or gold plated for durability and rich appearance. Heavy steel base with non-skid feet.

BY-1 Black base **\$87⁹⁵ • BY-2** Chrome **\$104⁹⁵**

BY-3 Gold **\$249⁹⁵ • BY-4** Black, Gold comp. **\$149⁹⁵**

POPULAR CLOCKS



972A (left) Battery operated 12-hour time quartz controlled clock with sweep-second hand. Huge 12" dial allows excellent visibility in large rooms. Black textured case and clear glass crystal. Uses one "AA" battery. 14" diameter x 1 1/2" deep **\$28⁹⁵**

973A (right) as above, but 24-hour version. **\$49⁹⁵**



972AD
14" diameter,
12/24 hour format
wall clock, sweep-second
hand. Uses one
"AA" battery **\$32⁹⁵**

MFJ

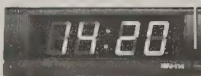
105C 24 Hour Quartz Wall Clock Handsome black, 10" dia. face, sweep second hand. Uses one "A" battery, not incl. **\$19⁹⁵**



world cities. Large 1 1/2" LCD readout, alarm function. One-second per day accuracy. Tilt bracket. Lithium battery backup. 5 1/4" w x 3 3/4" h x 3/8" d **\$24⁹⁵**

114 Giant LED

24/12 hour clock
Has four HUGE 2.3" high digits. The 12 or 24-hour display format is visible 50 ft. away or more! 110VAC with battery back-up feature. 6 1/2" h x 13" w x 1" d **\$39⁹⁵**



118 Jumbo LCD™

24/12-hour clock
1.25" h - high contrast LCD digits. Year, Month, Date & Day in four different languages. 100 year calendar, flip stand. Uses one "AAA" battery. 5 1/4" w x 3 3/4" h x 1/2" d **\$24⁹⁵**



Small 24-hour Clocks: A Dual Clock with separate UTC & local time displays, and a Single Clock with 24-hour time only. Heavy brushed aluminum frame, 5/8" high LCD numerals, sloped face. Flashing seconds colon, battery included.

107B Single Clock, 2 1/4" w x 1" h x 2" d. **\$9⁹⁵**

108B Dual Clock, 4 1/4" w x 1" h x 2" d. **\$19⁹⁵**



116 24/12 Hour LED Clock
Switchable 24 or 12-hour display, Large, red 5/8" LED digits. 10 minute ID timer, loud alarm. 110VAC with battery back-up. Compact, 4 1/4" w x 2" h x 4" d **\$14⁹⁵**



CSI interconnects
CONNECT SYSTEMS INC. provide a fully automatic interface between your FM base radio and phone line so that you can initiate and receive phone calls in your mobile or on your HT without assistance.

The CS-800 & CS-900 below each contains powerful microprocessor controlled features such as:

- 90 Memory Speed Dialer • Last Number Redial
- Built-in Programming Keyboard & Digital readout
- Remote Base Mode • Regenerated Tone or Pulse Dialout • CW ID • Toll Restrict numbers & sequences... and More!



CS-800 Full Duplex Interconnect

Operates Full or Semi-duplex and also has a built-in Repeater Controller. Simply connects to transceiver mic and speaker jacks. FCC & DOC approved. 12-15 VDC. 7 1/4" w x 7 1/2" d x 2" h, 2 1/2 lbs **\$359⁹⁵**



CS-900 Control Station Interconnect

A simplex interconnect for use with any simplex transceiver. Can also be used through remotely located repeaters (from your base) for additional range. Digital voice delay is standard. Connects to microphone & speaker jacks of a simplex transceiver. FCC & DOC approved. (Transceiver switching speed does not affect performance). 12-15 VDC. 7 1/4" w x 7 1/2" d x 2" h, 2.5 lbs **\$359⁹⁵**

CD-2 Communications Decoder Unit

When mobile, the CSI CD-2 will make it easy for you to use open repeaters and autopatches because it decodes and displays any CTCSS, DCS or DTMF codes other amateurs are using on the channel. When at the base, the RS-232 port exports all decoded CTCSS/DCS or DTMF data to your PC allowing use of CD-2P software. Maintains a history of CTCSS/DCS/DTMF data from the CD-2 occurring on the channel being monitored, creates usage graphs, etc. PC/DOS based. 12-15 VDC. 4 9/16" w x 4 5/8" d x 1 9/16" h, 1 lb. **\$249⁹⁵**

CD-2P PC Program for CD-2 **\$99⁹⁵**

For additional information you may contact CSI at:

Phone: 805-642-7184 • Fax: 805-642-7271
e-mail: sales@connectsystems.com
Internet: www.connectsystems.com

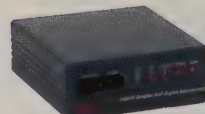


BC Series Battery Backup Systems Offering complete protection against surges, line noise, brownouts and blackouts. Tripp Lite uninterruptible power supplies keep your computer & Ham Radio equipment running in an emergency. Long lasting batteries give you up to 17 minutes backup time for 486/Pentium PCs.

Isobar - the World's Most Advanced Surge Suppressors. They provide instantaneous (Ons) response to power surges. Isolated filter banks eliminate connected equipment interference "Cascade circuitry" provides increased surge protection and diagnostic LEDs.

BC Internet models have RJ-11 jacks for complete Fax/Modem protection.

Various Models: See Tripp Lite in the Price List



4700VP Telephone Interconnect

SPECIAL - \$169⁹⁵

- The Most Versatile Simplex or Half Duplex Patch
- True DTMF Regeneration
- 25 Speed Dial Locations
- Full Remote "Over-the-Air" Programming
- Local programming
- VERATEC Smart Sampling VOX enhanced Protocol or Simple VOX Control
- Automatic Setup • CW-ID
- Automatic Last Number Redial • Hook Flash
- User Programmable ID Code
- Comprehensive Toll Restrict with Override Code • Call Limit Timer • Courtesy Beep
- Time Out Timer/Beeps
- Reverse Patch Ring
- Repeat Audio
- Busy Channel Inhibit
- CTCSS Logic Input
- Connect/Disconnect Control
- Tone Dialing/Multi-Country Pulse Dialing
- Extremely Compact and Rugged Construction (1.5 x 4 x 4 inches)



SDI-50 Automatic Simplex Interconnect

Gives telephone access to handhelds and mobiles. Remotely programmable from any DTMF phone. Converts base stations into a remote station accessible from any telephone. VOX-enhanced sampling, automatic CW ID. AC adapter and cables. 14 1/4" w x 8 1/4" d x 1 1/4" h, 3.75 lbs **\$469⁹⁵**

GROTHE Sirens & Horns

VS-2 Emergency Vehicle Siren

Designed for the Volunteer Fireman, a quality built Wail-Yelp alarm that delivers big sound performance - 120DbA sound level at 4 ft. Frequency range: 600 to 1200Hz. Pre-wired with a 3-position switch (Yelp-Off-Wail), high efficiency waterproof horn speaker, 10 ft. cable, mounting bracket & hardware. 12VDC @ 1.5A, 2.7 lbs. **\$89⁹⁵**

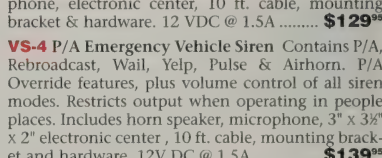


VS-3 Vehicle P/A and Airhorn with Rebroadcast

A big, powerful Airhorn Sound with four different sounds (no siren) really calls attention to your vehicle. Delivers 120 DbA level at 4 ft. Locking under the microphone with the supplied rubber band, you can monitor sound from a mobile rig, scanner, etc. via the speaker outside. Includes horn speaker, microphone, electronic center, 10 ft. cable, mounting bracket & hardware. 12 VDC @ 1.5A **\$129⁹⁵**



VS-4 P/A Emergency Vehicle Siren Contains P/A, Rebroadcast, Wail, Yelp, Pulse & Airhorn. P/A Override features, plus volume control of all siren modes. Restricts output when operating in people places. Includes horn speaker, microphone, 3" x 3 1/2" x 2" electronic center, 10 ft. cable, mounting bracket and hardware. 12V DC @ 1.5A **\$139⁹⁵**



Siren-Light Combo A one-unit siren/yelp alarm, revolving halogen or strobe light and window mount. Fits all cars, slides on top of the car window and plugs into cigarette lighter outlet. The power plug contains an "on" LED and three position switch to select Yelp, Off or Wail modes. 12 VDC @ 5A.



VS-2L Halogen Specify amber, blue or red. **\$249⁹⁵**

VS-2LS Strobe Specify amber, blue or red. **\$299⁹⁵**



ASTATIC Microphones

10DA-L (left) High-Z dynamic SSB microphone. Controlled 300-3000 Hz response provides high attenuation of the unwanted sideband & better copy through interference. 2 1/2" w x 1 1/2" h x 3/4" d, 17 oz. Black, uses T-UG9 stand..... **\$69⁹⁹**

D-104L (center) The original "super talk power" microphone, a favorite of hams for decades! High output and 300-7500Hz response with rising characteristics between 500 and 4000 Hz, provides maximum intelligibility. Shock proof cartridge with high-Z crystal element, metal sealed for protection. Solid machined brass parts, heavy mesh grille, all heavy chrome plated. 3" dia. x 1 1/4" d, 14 oz. Use T-UG9 stand **\$42⁹⁹**

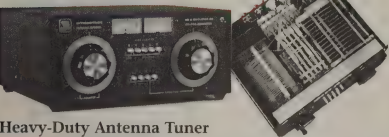
T-UG9 (right) Accepts D-104-L or 10DA-L microphone heads. Built-in adjustable preamp with an output impedance that matches most transmitters. Side switch bar for PTT with slide-up locking clamp. Height: 8 1/2" without head, base is 5 1/2" dia. Chrome neck, grey base, 6-wire coiled cable. Uses 9V battery.... **\$52⁹⁹**

SHURE



526T A dynamic microphone with a built-in solid-state preamplifier and adjustable volume control. Works into 500 to 5000Ω inputs, allowing it to replace most ceramic or dynamic original equipment microphones. The tailored 200 to 6000Hz frequency response provides very effective audio. Convenient momentary or locking push-to-talk bar operation. Comes with a coiled 5-conductor cord and wiring guide. Requires connector and 9V battery. 2 lbs, 11 oz. **\$119⁹⁹**

NYE VIKING



Heavy-Duty Antenna Tuner

MB-V-A 1.8-30MHz continuous tuning. Heavy duty silver plated variable inductor with 25:1 vernier dial. 7kV variable capacitor and 15kV switch selected fixed output capacitors. Tunes most antennas 1/4-wave length or longer from 40-2000Ω but some antennas may not tune at 1.8 MHz. Automatic SWR metering without reset or calibration. Separate automatically switched 300W/3KW RMS wattmeter. Precision 2 1/2" backlit meters display SWR and Power, continuously. Rugged, silver plated 5-position pushbutton antenna switch selects 4 antennas: 2 coaxial, single wire and balanced line, and bypass. Trifilar-wound 3KW toroid balun provides balanced output from 200 to 1000Ω, and unbalanced output down to 20Ω. Requires 9V battery for meter and external 12VDC for meter lights. 14 1/2" w x 6 1/2" h x 12 1/2" d, 18 lbs..... **\$879⁹⁹**

MB-V-B same specifications as MB-V-A, except no Power or SWR metering..... **CLOSEOUT \$649⁹⁹**

Low Pass Filter

Installs between transmitter output and antenna. Eliminates Television Interference caused by harmonics from 1.8-30MHz transmitters. Rated at 2KW, 5KW SSB peak. Flat, low loss passband and stopband for over 65dB attenuation above 57MHz. SO-239 connectors, both ends..... **020-001 \$56⁹⁹**

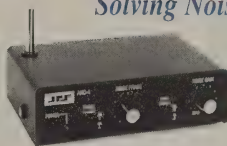


monics from 1.8-30MHz transmitters. Rated at 2KW, 5KW SSB peak. Flat, low loss passband and stopband for over 65dB attenuation above 57MHz. SO-239 connectors, both ends..... **020-001 \$56⁹⁹**



JPS Communications, Inc.

Solving Noise Problems with Digital Signal Processing!



Antenna Noise Canceller

ANC-4 Installs between the antenna and receiver. Usable between 100 kHz and 80 MHz. Eliminates local POWER LINE noise before it enters the receiver to let you hear signals you didn't know were there. Two front panel adjustments, PHASE and GAIN, reduces locally-generated noise typically by 50 dB. Short whip and wire noise pick-up antennas supplied with each unit. Rear panel connector for external noise probe. Automatic transmit switch over, handles up to 250 watts, has internally selectable delay time. Europe CE certified. 12V DC @ 300 mA. 1 1/2" h x 6" w x 4 1/2" d, 2 lbs.... **\$189⁹⁹**

PowerPack 115V AC adapter for JPS units..... **\$16⁹⁹**

Noise/Interference Reducer & Filter Unit

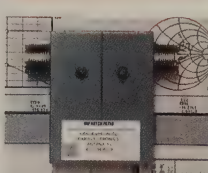


NIR-12 Features two 40 MHz DSPs to provide the most powerful & advanced DSP Noise Reduction Unit available. Unparalleled performance, super-selective FIR filters, fully adjustable filter center frequency & bandwidth (3400Hz-50Hz); both Dynamic Peaking AND Spectral Subtraction Noise Reduction; spectral multi-tone NOTCH filter. All modes & functions may be used simultaneously. Use on all modes, including AMTOR & PACTOR. Installs between the receiver audio output and external speaker. Europe CE certified. 12V DC @ 1A. 1 1/2" h x 6 1/2" w x 7 3/4" d, 4 lbs. **\$349⁹⁹**

SDK-12 Software Development Kit. Interface module & software for programming of the NIR-12 DSP chips via the serial data bus on your PC..... **\$35⁹⁹**

INTERMOD FILTERS

PAR ELECTRONICS



Solve most intermod or front end overload problems from paging systems with these small, asymmetrical, 45 to 54dB Notch Filters. The design is centered on the offending pager spectrum of 152 to 153 MHz and works effectively with an Insertion loss of typically 0.5 dB or less and a V.S.W.R. of 1.25:1. Works well with dual-band (2m/70cm) transceivers providing low-loss pass-thru of 70cm signals.

VHFDN152 2m base or mobile intermod filter, SO-239 connectors, 50W. 2" h x 1" d x 2 1/2" w..... **\$62⁹⁹**

VHFDN152HT 2m intermod filter for handhelds BNC connectors, 20W. 1 1/2" h x 3/4" d x 2" w..... **\$68⁹⁹**

UHFND450 UHF Intermod filter for base or mobile. Blocks pagers/two way transmitters that cause 70cm intermod; transparent to 2 meters..... **\$62⁹⁹**

UHF-12 12" Belden RG-58/U jumper cable with silver/gold/teflon PL-259's on each end..... **\$9⁹⁹**



MFJ MFJ ENTERPRISES, INC.

IntermodFighter™

Can eliminate intermod in your 2 meter handheld or mobile station. Three high-Q bandpass filters and two L-sections give you razor sharp selectivity.

Interfering signals below and above 2 meters are vastly attenuated while leaving your desired signal. MFJ uses surface mount RF components for superb performance.

MFJ-713 Has BNC connectors for use HTs. Self-contained, and uses a 9-volt battery. To eliminate intermod, remove the rubber duck and replace it with the MFJ-713. Re-install the duck - no more intermod! RF tight, rugged aluminum case..... **\$59⁹⁹**

MFJ-714 For mobile transceivers, SO-239 connectors. Installs between rig & antenna. Uses 12V DC..... **\$59⁹⁹**



HT Pouch

A protective carrying-case made of black nylon bonded to bouncy neoprene. Includes a quick-release, snap-out belt-loop clasp and a restraining-strap secured on the front with velcro. A foam block bumper in the bottom can be easily removed to accommodate larger batteries. Convenient Chest Pouches also available.

See **POUCH** the Price List



Chest Pouch

DCI DIGITAL COMMUNICATIONS



Bandpass Filters

Finally clear reception! This filter installs between your 2m, 220 or 440MHz rig and antenna to reduce the strength of out-of-band interfering signals while allowing the signals you want to hear pass through at full strength.

- Eliminate the random squeals, squawks, beeps and strange voices from your VHF radio caused by Intermod from strong, nearby pagers, police radio systems, taxis, etc.).

- Hear the signals you want to hear even in crowded urban centers with high-powered commercial systems.

- Design: (2M/220MHz) four helical resonators with aperture coupling, (440MHz) four 1/4-wave linear resonators with aperture coupling

- Accepts 200 watts of power • Reduces spurious transmitter emissions. • VSWR 1.5:1

- Made of extruded aluminum, copper and brass. 12w" x 3 h 5" d, 2 lb, 11oz • Totally passive, does not need DC power

2M models

146-4H Passband: 144-148; Loss <1 dB; Selectivity: -57dB @ 136MHz & -43dB @ 156MHz; SO-239 silver-terflon connectors..... **\$89⁹⁹**

145-2H - Passband 144 to 146 MHz **\$89⁹⁹**

220MHz model

223.5-3H - Passband: 222 to 225MHz; Loss 1 dB; Selectivity: -33dB at 233 3MHz and -28dB at 233 MHz; SO-239 silver-terflon connectors..... **\$89⁹⁹**

440MHz models

445-10C - Passband: 440 to 450MHz; Loss 1 dB; Typical selectivity: -47dB at 425MHz & -50dB at 456 MHz; Type-N silver-terflon-gold connectors..... **\$109⁹⁹**

435-10C - Passband 430 to 440MHz **\$109⁹⁹**

Upgrade to type-N connectors on 2m and 220MHz models - add \$10 to price; Special Order

e-mail: dcicl@dcicl.ca



DRAKE

R8B
Communications Receiver • Covers 10 kHz–30 MHz &

35–55 MHz with the optional VHF converter. Alpha-numeric display, kHz & MHz modes; dual VFOs; 1000 memories; multi-function scanning; AM/FM RTTY/CW/LSB/USB modes; 5 voice bandwidth filters. Built-in rx preamp/attenuator; & noise blanker. IF shift & notch. S-meter; dual time zone clock; passband offset; selectable AGC; built-in speaker; dual timers, multiple antenna inputs; sequential tuning; 3 selectable tuning step sizes. Direct entry of mode & bandwidth selection via keypad. Selectable sideband, synchronous AM detector. RS-232 computer control, optional interface software for MS-DOS computers. Connections for ext. speaker & tape recorder. Multi-voltage power supply. 13½" w x 5½" h x 13" d, 13 lbs. **\$1199⁹⁵**

1590 VHF Converter

Low VHF (35–55 MHz) & High VHF (108–174 MHz) coverage when installed in the R-8B **\$219⁹⁵**

MS-8 Matching External Speaker for R-8B **\$49⁹⁵**

SW-8

Communications Receiver • Covers 100 kHz to 30 MHz, 87 to 108 MHz (FM stereo with headphones) & 116 to

136 MHz Aircraft. 70 scannable memories. Standard and synchronous detection AM, selectable SSB reception on the Medium and Shortwave bands. Direct frequency entry keypad, 0.5uV sensitivity, dual 6 or 4 kHz AM selectivity, 2.3 kHz SSB selectivity. High contrast LCD readout, 100 Hz tuning accuracy. Dual-mode clock/timer. AC adapter supplied, or use optional batteries for portable operation. 11" w x 5½" h x 11½" d, 10 lbs. **\$799⁹⁵**

SW-1 Shortwave

Receiver • Covers 100 kHz–30 MHz with synthesized microprocessor controlled tuning;

32 programmable memories. Easy tuning by Tuning Dial; Up/Down Buttons or Direct Keypad Entry. Tune antenna inputs for coaxial feedline or wire antenna. 12VDC or use the AC adapter supplied. 10½" w x 4½" h x 7½" d, 4.7 lbs. **\$299⁹⁵**

SW-2 Shortwave Receiver Same as SW-1 except added features: Synchronous detection; 100 memories; larger display; Dimmer; Rear speaker jack. Improved sensitivity and selectivity. Optional convenient infrared remote control unit (pictured) **\$499⁹⁵**

MFJ

8100 Regenerative Receiver

Stations world-wide come in loud & clear with just a 10 ft. wire. Tune international SW, hams on SSB & CW, RTTY, packet. Covers 75–13M SW bands. Vernier drive tuning. Uses a 9V battery, Walkman-type earphones or plug-in speakers. 7" w x 2½" h x 6" d, 1 lb. wired **\$79⁹⁵**



SONY

ICF-SW10

Compact and convenient, easy to use. 12 bands; covers AM broadcast, FM (stereo with headphones) and 9 shortwave bands. Easy analog tuning with tuning indicator for accuracy. 6" w x 3½" h x 1¼" d, 12 oz. **\$49⁹⁵**

ICF-SW30

12 bands; covers AM, FM (stereo with headphones) and 10 shortwave bands. Automatic Scan Tuning in 1 kHz steps, 15 memory presets. The clock has world and local time display, alarm and sleep timer functions. Requires three "AA" batteries (not include) or external 4.5V DC. 4¾" h x 6¾" w x 1¾" d. **\$99⁹⁵**



ICF-SW55

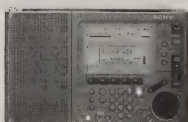
World Band Receiver. Similar to ICF-7600G (below), but improved. Factory preset name tuning provides access to most listened to broadcasts. Tuning methods: preset station, direct, scan or rotary dial. 125 memories. Requires 4 "AA" batteries or external 6V, AC adapter included. 4¾" h x 7¾" w x 1¾" d, 1½ lb. **\$349⁹⁵**

ICF-SW1000T

World Band Receiver. Covers LW/MW/FM/FM-stereo (via headsets) & 14 Shortwave bands. Manual or 10 key direct access and 32 memory presets. SSB reception, 1 kHz step tuning, synchronous detection, FM stereo reception via headphones. Includes a full-featured Sony Stereo Cassette-Corder built in to the back of the unit. Built-in clock with alarm & sleep timer. The timer. Record & Play feature allows convenient time shift recording. Includes stereo microphone and earphones, active antenna and carrying case. Uses 3 "AA" batteries or 3VDC. 4¾" h x 7" w x 1¾" d, 1½ lb. **\$549⁹⁵**

ICF-2010

Covers 150 kHz–30 MHz, 76 to 108 MHz and 116 to 136 MHz MHz and AM/FM/SSB/CW modes. Tunes manually or by keyboard entry, automatic scanning, memory scan or 32 memory presets. LCD display with light, switchable IF bandwidth, fine tune control. Convenient 12 and 24-hour clock with alarm, programmable timer and sleep timer. Telescoping antenna and built-in ferrite bar antenna. Nice sounding 4" speaker. Record, earphone, external antenna and external DC power jacks. Operates from three "D" and two "AA" batteries, external 12V DC, or 110V AC adapter. 6¾" h x 11¾" w x 2¾" d, 3¼ lbs. **\$359⁹⁵**



ICF-SW77

Same coverage (except for air band) and same features as the ICF-2010 (above). Manual or keypad frequency entry. Stores up to 100 stations (162 frequencies), allows stations to be selected by name and is capable of storing your favorite broadcast schedules. Programmable six-character Station Name Display, fine/accurate 50 Hz tuning resolution, FM stereo with headphones. Bass and treble controls. 10¾" w x 6¾" h x 1¾" d, 3¼ lbs. **\$469⁹⁵**

ICF-SW7600G

World Band Receiver • Covers 150 kHz to 30 MHz and 76 to 108 MHz FM; stereo with earphones. Synchronous AM detection, SSB capability. 10-key Direct Access Tuning™ and 20 station presets, LCD display. Tone control, external antenna and recording jacks, clock and timer with sleep and standby functions, tilt bracket. Includes compact reel-out antenna, and carrying case. Uses (4) "AA" batteries. 4¾" h x 7¾" w x 1¼" d, 1½ lbs. **\$189⁹⁵**

ICF-SW100S

The size of a Pocket Calculator, but loaded with advanced features. Covers 150 kHz to 30 MHz and the 76 to 108 MHz FM band; stereo when used with earphones. SSB reception capable, 100 Hz tuning, steps, 50 memory presets, 24 hour clock/timer, world time computer, station names display, illuminated LCD display. AC adapter, stereo earphones, active antenna, soft carrying case, station directory & manual are included. 4¾" h x 2¾" w x 1¼" d. **\$349⁹⁵**



YAESU

FRG-100B

High Performance Communications Receiver. 50 kHz to 30 MHz with CW, SSB, AM and optional FM modes. 50 fully-tunable memory channels store frequency, mode and filter selection; 20 additional memories provide band edge information used in scanning function. Multi-function

scanning (memory, band selectable group, priority) with carrier or time-delay resume enables convenient searching for new stations, or scanning within a known band. Twin 12 and 24 hour programmable clocks with on/off-timer and sleep-timer. Yaesu CAT system for PC control. 9¾" w x 3¾" h x 9¾" d, 6.6 lbs. . **\$619⁹⁵**



SANGEAN

ATS-303

PLL synthesized. 13 bands, covers 2.3 to 7.3 & 9.5 to 26.10MHz. AM, FM; FM stereo with headphones. Selectable continuous tuning across frequency range and/or shortwave band. Time & frequency display, auto or manual station search, 20 station memories. Large LCD display, tuning LED. Clock with radio or buzzer alarm & adjustable sleep timer. MW 9K/10K switch for overseas. Low battery icon. Requires 4 "AA" batteries or ext. 6V DC. 6 1/2" w x 4 3/8" h x 1 3/4" d, 15 oz **\$89⁹⁵**



SR-77

Miniature AM/FM & FM Stereo Portable Receiver with Deep Bass Boost feature. Uses single "AAA" battery. Only 3" w x 1 1/2" h x 3/8" d. No speaker, comes with Stereo earphones..... **\$34⁹⁵**



ATS-818CS (left) World Band Receiver with Programmable Cassette Recorder 16 bands, continuous coverage 50kHz-30MHz. AM/SSB/CW/FM modes; stereo via headphones, 45 memory presets. Tuning methods: Direct input, auto or manual scan, memory recall, rotary dial. AM wide or narrow filter, tone & RF gain controls, signal strength & battery indicator. Programmable cassette recorder, play & record LED indicator, auto-stop feature. Clock with dual time display, alarm & sleep timer. Uses 7 "AA" batteries. Includes AC adapter & external antenna adapter. 11 1/2" w x 7 3/8" h x 2 3/8" d, 5 lbs **\$229⁹⁵**

ATS-818 (right) World Band Receiver All features of the ATS-818CS, except cassette recorder **\$179⁹⁵**

ATS-909 FM-Stereo/MW/LW/SW PLL Synthesized Receiver Five tuning methods: Direct Frequency, Autoscan, Manual, Memory Recall & Rotary, 307 memories. Stereo via earphones, SSB reception. MW 9K/10K switch. AM Wide/Narrow filter & FM mono/stereo selector. Dual time with three timers & sleep timer. Clock displays 42 world city times. RF gain/tone controls. Lock switch, recorder output jacks, battery & signal strength indicator. Uses (4) "AA" batteries or 6V DC; AC adapter included. 8 3/8" w x 5 3/8" h x 1 3/8" d, 1.9 lbs ... **\$279⁹⁵**

ATS-606A Compact Digital All Band World Receiver Continuous ALL BAND coverage 153kHz-30MHz. AM/FM (FM stereo with earphones). 54 memories, manual or keypad tuning, 1kHz/step fine tuning, scanning, LCD display, dual time clock & sleep timer. 5 1/2" w x 3 3/8" h x 1 1/4" d..... **\$169⁹⁵**

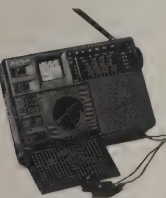


DT-200V Broadcast & TV Band Receiver (left) • Fits in shirt pocket or clips to belt. Covers AM and FM broadcast bands (FM stereo via headphone), plus the audio portion of TV channels 2 to 13. LCD display, up and down tuning buttons, auto-scan, 19 memories, automatic shut-off, built-in speaker. Belt clip and stereo earphones included. Uses (2) "AA" batteries. 4 3/8" h x 2 3/8" w x 3/8" d, 5 oz..... **\$79⁹⁵**

GRUNDIG

YACHT BOY 400 Covers 1.6 to 30MHz, all SW bands, FM broadcast band (stereo with earphones), AM and long wave broadcast bands. Direct keypad frequency entry or scan tuning with 40 memories. SSB reception with fine tuning control, high-low tone switch. Tilt stand, telescoping antenna. Multi-function backlit LCD display shows dual zone 24 hour time, frequency, band and signal strength. Dual selectivity. Automatic turn-on and sleep timer. Includes stereo earphones, external reel-up antenna for SW & carrying pouch. Uses 6 "AA" batteries or external 9V DC. 4 3/8" h x 7 3/8" w x 1 3/8" d, 1 1/2 lbs..... **\$189⁹⁵**

G400ACA AC adapter for YB-400..... **\$12⁹⁵**

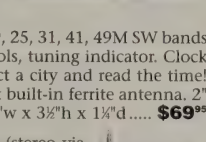


TRAVELLER II Covers AM & FM broadcast and the 19, 25, 31, 41, 49M SW bands Multi-function LCD display, pushbutton & slide controls, tuning indicator. Clock with travel alarm & World Time selection switch; select a city and read the time! Requires 3 "AA" batteries (not included). Telescoping & built-in ferrite antenna. 2" speaker, jacks for earphones & external AC adapter. 5 1/2" w x 3 3/8" h x 1 3/8" d..... **\$69⁹⁵**

TRAVELLER III Digital Covers AM & FM broadcast (stereo via headphones) & 13 Shortwave bands. LC display, push-button tuning & 20 preset memories. Quartz alarm clock. Uses 3 "AA" batteries (not incl.), AC adapter supplied. 5 1/2" w x 3 3/8" h x 1 3/8" d **\$139⁹⁵**

Mini-World 100 World Band Pocket Radio (right)

Put the world in your pocket with the Grundig Mini-World 100 AM/FM & 6 Shortwave bands. Built-in speaker, telescoping & ferrite bar antennas, LED indicator. Includes earphones, belt clip. Uses 2 "AAA" batteries. (not included) 4" h x 2 1/2" w x 3/8" d..... **\$49⁹⁵**



ICOM

See the Price List for complete listing of ICOM Accessories



R-8500

Super Wide Band All Mode Communications Receiver

Covers 0.1 to 2000

MHz (cellular blocked) in 10 Hz tuning steps. kHz to 30MHz, all modes. TV & Stereo FM is optional with TV-R7100. Dual VFOs and direct keyboard entry, thirty-two tunable multi-function memories. RIT, notch, selectable AGC, noise blanker, tone, squelch, recording jack. Selectivity: 500 Hz, 2.3 kHz, 6 kHz, 15 kHz. Optional wireless remote controller and voice synthesized readout board. 110/220V AC; Optional kit available for 12V DC. 11 1/2" w x 4 3/8" h x 10 3/8" d, 16 1/2 lbs..... **See Price List**

R-100-11

Mobile Desktop Scanner

Covers 100kHz to 799 MHz & 900-1856 MHz. Cellular blocked. AM, FM wide & narrow modes; Direct Keypad entry or selectable step knob tuning, 7 scanning. modes. 121 memories: 100 for frequency, mode, attenuator and preamplifier settings; 20 scan edge for ten pairs of ranges for programmed scan & one priority. Convenient 24-hour clock & timer. Telescoping antenna plus three external antenna inputs provided. DC cord & mobile mount 13.8VDC @ 1A **See Price List**

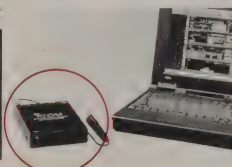
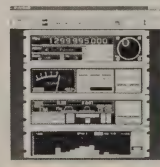


R-10-05

General Coverage Pocket Scanning Receiver

Covers 500kHz-1300MHz (cellular blocked). AM, SSB, FM wide or FM narrow modes. Programmable tuning steps. On-screen spectrum display, 1000 non-volatile memory channels arranged in 18 banks of 50 channels. Scan by bank, mode, or program. Alpha-numeric characters can be entered to identify channels & banks. Noise blanker and automatic noise limiter. Auto frequency control (AFC) & more! Easy-to-read edge-lit LCD display, 24-hour clock with timer, adjustable LCD contrast, signal indicator, power-saver function. Uses Ni-Cd, alkaline or other DC source. Ni-Cds & wall charger incl. 2.3" w x 5.1" h x 1.2" d **See Price List**

24-hour clock with timer, adjustable LCD contrast, signal indicator, power-saver function. Uses Ni-Cd, alkaline or other DC source. Ni-Cds & wall charger incl. 2.3" w x 5.1" h x 1.2" d **See Price List**



ICOM IC-PCR1000

Communications Receiver for Computer

Turn your PC into a world-wide communications receiver. Connect the IC-PCR1000 to your laptop or desktop IBM compatible computer for reception of a wide range of radio frequencies. Listen to favorite stations in the background while running other apps. 100% PC hardware external, IBM PC compatible. Everything you need to connect to your computer is included: Power supply, Built-in speaker, Antenna, RS-232 cable and software..... **See Price List**

Frequency coverage
0.01000-823.999999 MHz*
849.000001-868.999999 MHz
894.000001-1300.00 MHz

*Guaranteed 0.5-1300 MHz only

Modes WFM, FM, AM, SSB, CW
of Memory Channels: 1000/tile
Requires

• IBM® PC compatible computer

- Windows® version 3.1 or 95
- Intel 486DX4 or better (Pentium® 100MHz or better recommended)
- At least 10MB of HD free space
- At least 16MB of RAM
- FD drive, RS-232C (38400 bps or faster) serial interface
- Display with 640 x 480 pixel resolution or greater



ICOM Leads the Way with New PC Ready Scanners and Receivers

The whole world in a little black box! ICOM's newest receiver is a PC-external peripheral (no internal PC installation required). It's true plug and play world band convenience!

- 100% PC Controlled
- Wide Band 100 kHz – 1.3 GHz*
- All Mode AM, FM, WFM, SSB, CW
- 3 Selectable User Screens
- Unlimited Number of Memory Channels
- Runs on Windows® 3.1 or 95

NEW!

IC-PCR1000


**External, PC-controlled
Wide Band Receiver**

Plug and play. Software, 6-pin RS-232C cable, antenna and AC adapter are **included**.

Plug and play. Standard third party serial cable required for PC connection.

IC-R8500

**The Expert's Choice
is Also Easy to Use**

ICOM's latest base station is a handsome rig that will look as good in the home living room as in the listening shack. Built ready for easy PC control, the IC-R8500 is only a cable away from software customized operation. 



- Wide Band 100 kHz – 2 GHz*
- All Mode AM, FM, WFM, SSB, CW
- Commercial Grade
- Built-in CI-V Command Control
- Built-In RS-232C Port

- 1000 Memory Channels
- IF Shift & Noise Blanker
- Audio Peak Filter (APF)
- Auto Frequency Control
- 7 Different Scan Types

**Uses "AA"
Alkalines
or Ni-Cds**

One of the IC-R10's great features is the **SIG NAVI** scan. While you listen to a paused frequency, the SIG NAVI scan looks for the next busy frequency within 100 kHz.



Select ICOM options required, depending on PC control or cloning task desired.



IC-R10

**Catch More Listening
Excitement on the Go**

Whether you're new to scanning or a longtime listener, this rugged little handheld delivers.

- Wide Band 100 kHz – 1.3 GHz*
- All Mode, Including SSB
- PC Cloneable
- 1000 Memory Channels

- "Real-Time" Band Scope
- 7 Different Scan Types
- **EASY MODE** for Beginners
- Uses "AA" Ni-Cds (included) or Alkalines – your choice



ICOM
RECEIVERS

<http://www.icomamerica.com>

*Cellular blocked: unblocked versions available only to FCC approved users.

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MFJ ENTERPRISES, INC.



784B Super DSP Filter Digital Signal Processing automatically eliminates heterodynes and reduces noise & interference on SSB/CW/AM, all digital modes, VHF, EME & satellite. Tunable FIR linear phase filters minimize ringing, prevent data errors, and have up to 60dB attenuation as close as 75Hz away. Tunable Spotting Tone™ automatically tunes the CW filter even in the narrowest bandwidth. Adaptive Tuning™ center frequency tuning automatically becomes finer as you narrow the bandwidth making extremely narrow filters easy-to-use. Automatic notch with variable aggressiveness. 2 watt audio amplifier with AGC. 12V DC or 110VAC with MFJ-1315. 2½" h x 9" w x 6" d **\$229⁹⁵**



752C SSB/CW Audio Filter (left) Pull out stations from noise and interference. Peak, notch, low or high pass control helps to eliminate heterodynes and interference. Filters tune 300 to 3000Hz; bandwidth varies from 40 Hz to almost flat; notches to 70dB. Noise limiter. Switchable inputs for two radios. Use 9 to 18VDC or 110VAC with MFJ-1312B. 10" w x 2" h x 6" d .. **\$89⁹⁵**

956 LW/MW/SW Preset Selector/Tuner (right) Improves reception of signals from 150kHz-30MHz. Boosts signals while rejecting images, intermodulation, and other phantom signals. 2" h x 3" w x 4" d **\$39⁹⁵**

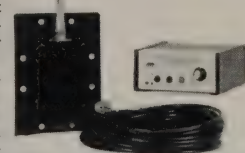
959B Antenna Tuner & Pre-amplifier

For 1.6 to 30MHz, provides a proper impedance match between antenna and receiver for best reception. Built-in 20dB preamplifier with gain control and 20dB attenuator. Select from two antenna inputs for two receivers. 9 to 8V DC or 110V AC with MFJ-1312 adapter. 5" w x 2" h x 6" d **\$99⁹⁵**



1024 Outdoor Active Antenna

For 50kHz-30MHz reception. A separate RF Amplifier Module with a 54' whip mounts anywhere outside with an interconnection made by a supplied 50 ft. coaxial cable to the Control Unit, inside. The control unit contains a gain control and 20dB attenuator to prevent receiver overload from the amplifier. Switches select between two receivers and auxiliary antenna. LED "on" indicator. Auxiliary input and output jacks. 12VDC or 110VAC with MFJ-1312. Control unit: 6" w x 2" h x 5" d, Outside module unit: 3" h x 4" w x 4" d **\$119⁹⁵**



1020B Indoor Active Antenna

Covers 300kHz-30MHz in five bands. Built-in 21 inch telescoping antenna provides maximum signal strength. Also functions as a preselector when using an external antenna. Minimizes intermodulation, improves selectivity and reduces noise. Tune, Band, Gain, On-Off/Bypass controls. Uses 9V battery, 9-18V DC or 110V AC with MFJ-1312B. 5" w x 2" h x 6" d **\$69⁹⁵**



462B Multi-Reader

Decode RTTY, ASCII, CW & AMTOR signals from Amateur, Commercial, Military, Weather, Aero and Marine. Plugs into receiver phone jack; displays messages on a 16 character LCD display. 12V DC. 5½" w x 2½" h x 5½" d .. **\$159⁹⁵**



AMECO TPA Tunable Preamplifier & Active Antenna Covers the 2 to 30 MHz range in 5 bands. Use it with an outside antenna as a tunable preamplifier with better than 20dB gain and low noise figure, or as an effective indoor active antenna using the built-in 30 inch collapsible whip. Requires 9V battery or 110V AC from the optional PT-9T AC adapter. 2½" h x 8" w x 6½" d **\$79⁹⁵**

ANTENNA SUPERMARKET

EAVESDROPPER Shortwave Antenna

A center-fed dipole with an 8-trap configuration. Provides reception of all shortwave bands from 11 to 90 meters. Includes Zap-Trapper® gas-tube lightning arrestor and 50 feet of support rope. Overall length is 42 feet and comes fully assembled.

When ordering, specify with 100 feet of 72Ω twin lead, or weatherproofed coaxial center connector (coaxial cable is not included)..... **\$79⁹⁵**



DX-SWL Shortwave Sloper Antenna Covers 13, 16, 18, 19, 21, 25, 31, 41, 49, 60, 90 & 120 meter shortwave bands, plus the AM broadcast band. Sloper design provides outstanding reception of low-angle DX signals. Multi-band transmit capability with an antenna tuner, handles up to 2000 watts. Overall length is 60 ft., requires 50Ω coaxial cable **\$79⁹⁵**



DX-ULTRA Shortwave Dipole Covers AM Broadcast through 30MHz. Efficient, low-noise, broadband performance for Medium Wave, Tropical, International SW, Military, Government, Embassy, Maritime, Aircraft, Commercial & Utility frequencies. Designed with inductors, parallel wire elements and a center insulator with a built-in static electricity Protector. Length is 80 ft. - may be installed as a dipole, inverted-V, or full sloper. It can be used with an antenna tuner as a transmit antenna up to 2kW. Connector accepts coaxial cable or balanced line. Assembled **\$119⁹⁵**

See the Index under Alpha Delta and Polyphaser for Lightning Protection devices.



- 2-25W 100% duty cycle
- 8 Channels - PLL synth.
- Optional programming kit
- CTCSS encode/decode
- Programmable features: Frequency, CTCSS, HI/Low power, Hang timer, Time-out timer
- Wall Mount or optional 19" rack mounting kit
- DB-25 connector for accessory and 8-pin modular jack for phone line
- Modular card style unit construction • 25 lbs.
- 14-3/4" x 10-3/4" x 4-3/8"

VXR5000VADC 2 meters, 12VDC @ 7A. **\$1199⁹⁵**
VXR5000UCDC 440 MHz, 12VDC @ 7A. **\$1199⁹⁵**
VXR5000U/TC 440 MHz w/AC supply ... **\$1399⁹⁵**

ROSETTA laboratories



Plug-in Receiver Card

Screen Display

The WINRADIO package contains a Receiver Card, Software, Handbook and an indoor antenna.

Receiver • A PC card that simply plugs into a slot in the motherboard of your IBM compatible computer to turn it into a sensitive wideband receiver with awesome features and powerful scanning options. The card contains the entire microprocessor controlled receiver with connectors for an antenna and an external speaker or headphones.

Software • The package contains a Windows program with impressive graphics of an actual receiver front panel with readout, labels and controls. Using the keyboard or mouse, WINRADIO can be operated exactly like a professional radio receiver with features found on high quality equipment. Includes on-line help and a DOS command-line program.

Handbook • The handbook provides an introduction to WINRADIO and radio scanning, with a start-up list of interesting stations to try including NASA space program frequencies. Also contains interfacing information needed by programmers to create their own WINRADIO applications.

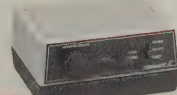
Technical Specifications

Receiver Type: PLL-synthesized, triple conversion superhet.
Frequency Range: 500kHz to 1.3GHz (Cellular Blocked)
Tuning Steps: 1kHz to 1 MHz
Modes: AM, FM-W, FM-N, SSB
Sensitivity: 1uV (nominal)
Audio output: 200mW into 8Ω load

\$499⁹⁵

System Requirements

IBM PC compatible with 386 processor or higher • DOS 3.3 or higher, or Windows 3.1 or higher (including Windows 95) • 640KB RAM (4MB recommended for Windows uses) • Vacant slot for 16-bit interface card • Speaker or headphones with standard 3.5mm stereo plug.



BMI Nitellogger II

Automatic Tape Recorder Activator Takes audio from any 8 ohm source and provides a 600 ohm match and voice activated relay operation for a tape recorder. Three connections: the radio's external speaker jack, the recorder's remote and microphone input jacks. This device can also make a simple crossband repeater by connecting up two HT's. Built-in monitor speaker with volume, drop-out sensitivity and delay controls, record light. 110V AC adapter supplied **\$69⁹⁵**

RC-1A Impedance Matching Patch Cord Provides a proper impedance match between an 8 ohm audio source and a 600 ohm tape recorder input. Provides proper loading for the source device, an attenuator prevents recorder input overload. 3.5mm audio plugs **\$19⁹⁵**



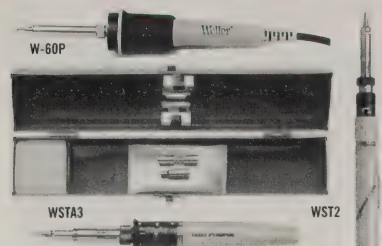
ICOM FM Repeater

Various Features: Commercial Quality • 24 Hour Continuous Duty • AC/DC Operation • DTMF Remote Control • Programmable CW Call Sign I.D. • Time-out Timer • 5.9" h x 14.5" d x 14.5" d, 37.5 lb

All Models are Special Order

RP-1520 144-148MHz, 25W output **\$2499⁹⁵**
RP-4020 430-450MHz, 50W output **\$2649⁹⁵**
RP-1220 1240-1300MHz, 10W output **\$2849⁹⁵**

You may call us for more detailed information on these Icom and Yaesu Repeaters.



WELLER Solder Equipment

W-60P 60-W Pencil-type Soldering Iron For most circuit work. Supplied with 1/16" 700°F screw-driver tip. 7 1/2" long, 2 1/2 oz., 6 ft. cord, 120V **\$61⁹⁵**

WP-25 25W Pencil-type Soldering Iron For work on delicate electronic circuits. 750°F tip temperature. 7 1/2" long, 1 1/2 oz., 4 ft. cord, 120V AC..... **\$32⁹⁵**

WST3 PyroPen® Butane Soldering Iron Lightweight and completely portable. Operates for up to three hours on a charge of regular cigarette lighter butane. Soldering temperature control is adjustable from 392° to 932°F, with a very fast heat-up time. It's ready to solder in just 30-seconds! Supplied with tips for soldering, hot air (1202°F), and brazing..... **\$99⁹⁵**

WST2 PyroPen® Jr. A portable mini butane powered soldering iron. Recharges in seconds from a regular cigarette lighter butane container. The soldering temperature is adjustable from 392° to 842°F. Also, hot blow feature (806°F) and torch feature (2372°F). Has handy pocket clip **\$85⁹⁵**

7200PK Soldering Gun Compact, lightweight, 75-watts for bigger work. Handles connectors and almost any other heavier soldering job. The flat, self-supporting back acts as a convenient rest when not in use. With Carrying case, extra tip and solder. 120VAC. **26⁹⁵**

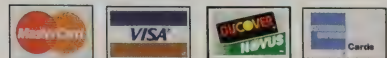
WTCPT Controlled Output Soldering Station This pencil iron is safe for soldering. ICS. Power unit with unitized on-off rocker switch with indicator light. Storage tray holds extra tip and tip cleaning sponge..... **\$119⁹⁵**

EC-1002-1 Soldering Station Compact. Soldering pencil stand connects to right or left side of unit. Variable temperature, indicator light, self feeding reservoir with cleaning sponge. Tray stores extra temperature sensing tips ... **\$199⁹⁵**

WAHL

7740 Cordless Soldering Iron Provides tip performance up to 50 watts and over 700° Contains a premium nicad rechargeable battery for high-rate charging; a partially discharged unit will return to full capacity within 1 to 2 hours, with a complete recharge in 3 to 4 1/2 hours. Replaceable battery and worklight. Comes with recharging stand, fine and heavy tips **\$46⁹⁵**

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NC-101 Encoder

Micro-miniature CTCSS Encoder, field tunable to any of the CTCSS tone frequencies between 67Hz to 254 Hz. 5 to 15VDC. 0.60"W x 0.80"L x 0.15"H **NorFax™ #5040** **\$19⁹⁵**

NC-104 Programmable Encoder

Sub-miniature, field programmable CTCSS Encoder unit for limited space. Provides the standard 37 EIA CTCSS tones + 69.37, 97.4 and 205.5 Hz. 7 to 24VDC. 0.625"W x 0.80"L x 0.170"D **NorFax™ #5150** **\$24⁹⁵**

NC-106 Programmable CTCSS Encoder/Decoder

A sub-miniature crystal-controlled digital unit. Field programmable with dip switches providing any one of the standard 37 CTCSS tones + 97.4Hz. 6-24VDC. 0.85"W x 1.35"L x 0.28"H **NorFax™ #5230** **\$54⁹⁵**

NC-401 Touch-Tone® Decoder

A unique micro-miniature unit combining two distinct multi-addressable decoders for control of remote or local applications. Decodes all 16 DTMF characters with an address length of 1-14 characters and features EPROM memory for storage of both primary and secondary codes, input/output functions, dead-beat disable and user outputs, plus default reset. Programming easily performed by means of a conventional DTMF encoder. 6-24V DC. 0.80"W x 1.37"L x 0.23"H. **NorFax™ #5545** **\$59⁹⁵**

More Info: Call the **NorFax™** automated 24-hr. fax retrieval system - 530-477-8403

New Clocks from MFJ...



MFJ-152 ThermometerClock™

At a glance you can tell the outdoor & indoor temperature and time. Huge 3 1/4-inch LCD multiple display shows a 12/24 hour time format and Celsius or Fahrenheit temperatures. Automatic daily update of the minimum & maximum temperature readings and a memory function that recalls the maximum & minimum temperature readings during a period you select. Handsome, tough molded plastic, attractive mounted on the wall or displayed on your desk. Comes with outdoor sensor, sensor mount and 10 ft. of wire. 5" h x 2 1/2" w x 3/8" d. "AA" batteries are included. **\$24⁹⁵**

MFJ-119 GIANTdisplay™ 12/24 Hour Calendar/Clock

Size is 8-1/2 x 9 inches making it easily visible from 15 to 20 feet away. The digital display shows: 12 or 24 hour clock format; digital calendar (year, month, date, day), and Celsius or Fahrenheit temperatures.

While & silver speckled - attractive for Ham Shack, office, police, fire, etc. "AAA" batteries included **\$49⁹⁵**



COMMUNICATIONS SPECIALISTS, INC. Tone Encoders & Decoders

SS-64 Programmable CTCSS

Encoder Super small for easy installation in most HTs. Standard with 32 EIA tones between 67 and 203.5 Hz. Individual tones are dip-switch selectable 0.66" x 1.08" x 0.21", requires 6-15 VDC. **\$28⁹⁵**

TS-32P Field programmable CTCSS Encoder-Decoder DIP

switch programmable for 32 EIA tones from 67 to 203.5 Hz. 1 1/2" x 2", 0.4", 6-25 VDC. **\$57⁹⁵**

DTD-1 DTMF Decoder Small,

high quality and low cost. Decodes any one of 5,040 4-digit codes to provide a latched or momentary open collector output for single function operations. 1 1/2" x 2" x 0.4", requires 6-12 VDC. **\$49⁹⁵**

TE-32 Multi-tone Encoder

Provides direct access from a front dial rotary switch to all EIA CTCSS tones from 67.0 to 203.5Hz, allowing users to access various repeaters Great for mobile or test bench. 5 1/2" x 3.3" x 1.7", 6-30 VDC **\$49⁹⁵**

TE-64 Multi-purpose Encoder

Provides 64 tone frequencies. Includes 32 sub-audible, 19 burst-tone, 8 Touch-Tone® and 5 different test frequencies. Separate outputs for high & low frequency ranges. 5 1/2" x 3.3" x 1.7", 6-30 VDC **\$79⁹⁵**

ID-8 Multi-Featured

Automatic Morse ID'er Programmable via 12-button keypad. Eight changeable messages, 200 characters total. CW speed: 1-99 wpm; ID interval timing: 1-99 minutes; ID hold-off timing: 0 to 99 seconds; CW tone: 100-3000Hz. Board: 1.85" x 1.12" x .035" **\$69⁹⁵**

PIPO Communications High Quality DTMF Encoders



PK-1
\$71⁹⁵



PK-2
\$76⁹⁵

- 12-digit or 16-digit pads
- Steel Keys
- Sealed Gold Dome Contacts
- Self-contained
- NO RF
- Simple 3-wire connection
- 2.65" h x 2" w x .045" (PK-1)
- Voltage 8.5 to 16V DC
- Temperature -22 to +160 F
- Adjustable level and timing
- Front panel adjustable
- Includes template, hardware and schematic
- 2.65" h x 2.5" w x .045" (PK-2)

K-Series option: features a built-in keying circuit & relay to automatically key a transmitter or other system. When any key is depressed, a relay closes for 0-3 seconds, time is adjustable with a trimpot.

PK-1K \$78⁹⁵ - PK-1M \$71⁹⁵

M-Series option: a special encoder package for mounting any PK-1/1K, PK-2/2K PIPO encoder to surfaces that are inaccessible from the rear such as walls, mobile dashboards, panels, etc. Consists of a frame which secures to the mounting surface with the encoder press-fitting into the frame.

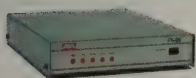
PK-2K \$83⁹⁵ - PK-2M \$76⁹⁵

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AEA / TIMEWAVE TECHNOLOGY INC.



PK-12 1200 bps VHF/UHF packet TNC. The ideal unit for getting started in Digital Communications. 1200

bps, VHF Packet ready; Gateway as a Node; PC PakRatt Lite™ Control software included; APRS™ software included; APRS Adapter Cable available; AEA Host mode; Advanced command set; Identify TCP/IP, TheNet & NetRom; GPS firmware & commands; Stand alone tracking; External TX adjustment. Perfect for base station and full of features for mobile. Low drain - 12V DC, or can operate on a 9V battery. 5 3/4" w x 5 1/2" d x 1 3/4" h, 12 oz **\$99⁹⁵**

PK-96 9600/1200 bps packet TNC A plug-in and go TNC, loaded with features. 9600/1200 bps Packet Ready; GPS firmware standard; Remotely programmable GPS commands; Stand Alone Tracking; Hardware HDLC for accuracy; True DC to hear weak signals; Gateway as a Node; TheNet X-1J Node firmware option available; Full MailDrop facility; PC PakRatt Lite™ terminal control software & APRS™ software included; AEA Host mode; Advanced command set; Identify TCP/IP, TheNet & NetRom; Separate external TX for 9600/1200 bps adjustments; External reset. Windows™ and Macintosh™ program available. Requires 12V DC. 6 1/2" w x 7 1/2" d x 1 3/4" h, 1 1/4 lbs. With 32K RAM (18K Mailbox).....**\$169⁹⁵** or 128K RAM (100K) .. **\$199⁹⁵**



DSP-2232 Multi-mode Data Controller with Gateway and Pactor

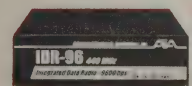
Simultaneous dual port HF/VHF operation. All amateur PSK satellite modes: PACSAT, OSCAR 13 and UO-22. Up/down Doppler shift for PSK modems and outputs for up/down frequency stepping to control frequency. Compatible with G3RUH/K9NG 9600 baud modems. LCD channel mode and status. 11 1/2" w x 9 3/4" d x 2 3/4" h, 4 lbs **\$499⁹⁵**



DM-1 Deviation Meter

Measure FM transmitter deviation on 144, 220, or 440MHz bands. Battery powered, crystal controlled, no tuning. Two ranges allow accurate measurement of voice, data, DTME, and sub-audible deviation on a 10-segment LED bar display. Includes outputs for an external digital or analog meter, and audio signals. 6 3/4" x 4 3/4" d x 1 3/4" h, 1 lb..... **\$169⁹⁵**

AEA/Timewave - CLOSEOUTS



IDR-96 Integrated 440MHz 9600 bps Data Radio Features PK-96 TNC technology and a 5W, crystal controlled radio operating on 441.05MHz. Simple operation, no tuning! Full featured mailbox; Gateway node operation; advanced GPS; Identification of TCP/IP, TheNet; and NetROM stations and much more! PC PakRatt Lite™ & APRS™ software. 12VDC **\$379⁹⁵**



PCB-88 A full-featured, 1200 bps, IBM compatible, HF/VHF packet controller computer board. Plug it into any 8 or 16-bit expansion slot in your XT, AT or compatible PC.....**\$99⁹⁵**

www.timewave.com



HAL COMMUNICATIONS CORP.

P38 Multi-mode HF Modem

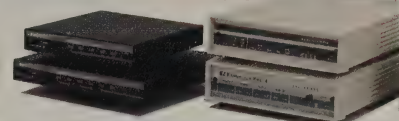
A full-size 13 1/2" DSP card for all AT compatible PC's. Provides the best all-around performance on CLOVER, PACTOR, AMTOR and RTTY. Does not require the use of Comm ports or IRQ's. Operating software for your PC is included. Latest updates are available through the HAL Techline and the Internet. Third party software, such as EXPRESS, RAGCHEW, WF1B is available. One-year warranty..... **\$295⁹⁵**



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Packet Controllers Amateur Paging Multi-Mode Controllers See the Price List & Index

Kantronics G-TOR™ BOOK

The New Mode A valuable collection of previously-published articles, a detailed description of the G-TOR protocol and numerous informational numerous charts. Written primarily by the Kantronics staff of Phil Anderson, WØXI, Karl Medcalf, WK5M & others. 90 pages **\$14⁹⁵**

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PacComm Packet Radio Systems, Inc

PicoPacket Miniature TNC Z-181 high integration MPU with one megabyte address space • Online help • Personal message system • APRS • Terminal programs for DOS and Windows included • Open squelch DCD circuit included • Optional internal GPS receiver & Slide-on battery pack option • Slide-on battery pack option 1" h x 2 1/2" w x 3 1/2" d • Standard model with 128K RAM **\$149⁹⁵**

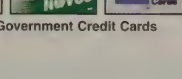
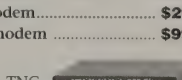
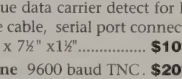
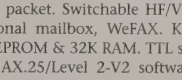
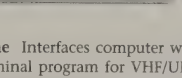
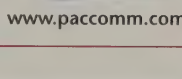
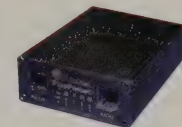
PicoPacket Dual 128K Dual Serial Port model - adds hardware clock and second serial port for GPS or weather station to the standard model..... **\$199⁹⁵**

Tiny-2 MK-2 Multi-purpose Basic TNC 32K RAM • TNC-2 EPROM compatible WA8DED host mode • KISS mode for satellite and TCP/IP Telemetry via RS-232 or TTL port • Disconnect header (will accept any TNC compatible modem) Packet communication for a weather node • 45ma. draw • 5" h x 7" d 1 1/2" h **\$149⁹⁵**

Tiny-2MK-2/GPS Tracker Basically the Tiny-II with a built-in GPS unit. Supplied with a small magnetic-mount Trimble GPS antenna..... **\$499⁹⁵**

Spirit-2 High Performance Packet Controller Designed to be configurable by setting jumpers and installing optional logic devices to support various tasks without performance compromise..... **\$239⁹⁵**

HandiPacket Packet controller Ideal for portable or mobile operation • Loaded with features • Built-in 10-hour battery pack • 1.28" h x 2.55" w x 4.15" d .. **\$229⁹⁵**



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1270B Multi-mode Data Controller 10 modes: PACTOR, 16-level FAX, Color, SSTV, PACKET, AMTOR, RTTY, ASCII, CW Navtex & Memory Keyer. Enhanced Mailbox, 32K RAM, 16-gray level modem, 20 LED tune indicator, Auto Signal Analysis, MARS mode, sidetone amplifier, internal modem header, 10 programmable message buffers, packet connect bell, dual radio ports, "Has Mail" LED, KISS interface, Host mode, Threshold control, RS-232/TTL ports. 12 VDC. 9 3/4" x 9 3/4" x 1 1/2" .. **\$269⁹⁵**

780 DSP Board Adds DSP filter to 1270B..... **\$89⁹⁵**

1278BT Same as MFJ-1278B except Turbo version, includes a 2400 baud modem **\$299⁹⁵**

1278B/DSP The MFJ-1278B w/DSP filter **\$349⁹⁵**

8621 2 meter Packet-only Data Radio

High-performance through 9600 baud. Plug in the TNC cable, your antenna and power - you're ready for packet. Crystal controlled on 145.01 MHz 5W output, requires 12 VDC @ 1 Amp. 5" w x 5 1/2" d x 1 1/2" h..... **\$109⁹⁵**

8631 220MHz Packet-only Data Radio Same a functions as 8621, but 223.700MHz and 3W output **\$129⁹⁵**

8621X1 Dedicated VHF Data Radio for APRS Automatic Packet Reporting System transceiver. Ready to go on 145.79 MHz **\$129⁹⁵**



1270C TAPR TNC-2 Clone Interfaces computer with RS-232 serial port and terminal program for VHF/UHF, OSCAR and other non-FM packet. Switchable HF/VHF modems. EasyMail™ personal mailbox, WeFAX. KISS interface for TCP/IP, 256K EPROM & 32K RAM. TTL serial port, battery back-up. AX-25/Level 2-V2 software, hdwe HDLC-full duplex, true data carrier detect for HF, multiple connects. interface cable, serial port connector & AC adapter. 12 VDC. 9 3/4" x 7 1/2" x 1 1/2" **\$109⁹⁵**

1270CQ TAPR TNC-2 Clone 9600 baud TNC. **\$209⁹⁵**

2400 2400 bps packet modem..... **\$29⁹⁵**

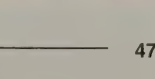
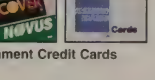
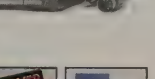
9600B 9600 bps packet modem **\$99⁹⁵**

781 DSP for all TNCs

Separate unit gives your TNC (Kantronics, etc) Digital Signal Processing power **\$119⁹⁵**

1272B/M TNC/MIC

Switch Just push button for voice or digital. Specify radio and TNC connection..... **\$39⁹⁵**

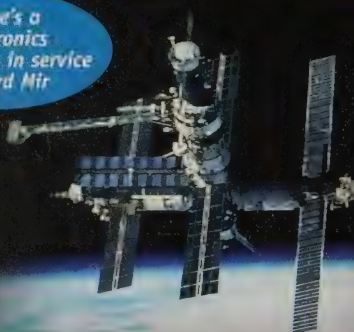


We accept I.M.P.A.C.® Government Credit Cards

See Price list for pre-wired 8621-to-TNC cables. Crystals for other packet channels may be ordered from MFJ by calling 1-800-647-1800.

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There's a world of digital communications fun and adventure that *only hams can enjoy* and Kantronics makes it possible for you to explore it. No matter if you call our products TNCs, wireless modems or digital controllers, the "Outernet™" offers a world of adventure, including satellite communications, APRS*, DX spotting, BBS operations, WEFAX, EMWIN, TCP/IP links, remote control and sensing, telemetry, HF e-mail with ham gateways or commercial service providers and more!



Commercial versions of Kantronics TNCs are being used in ever-increasing numbers!

Kantronics offers a number of ways to enjoy the growing field of digital communications. Choose the unit that suits your interests and budget. All Kantronics units come with a one-year limited warranty and can be upgraded when firmware updates become available.

KPC-3 Plus



8.2 Firmware now with Advanced GPS/APRS UI duplicating available for all 4 models!

- 1200 bps - Now with more features!
- Packet, GPS/APRS, Host, KISS and WEFAX modes, use with EMWIN
- Personal Mailbox (PBBS) now supports multiple calls
- Remote access, sensing and control with two A/D and two control lines
- PBBS 100k, expandable with optional 512k RAM
- Uses external power or internal 9v battery
- NEWUSER mode and online help

KPC-9612 Plus



Optional 1200 or 9600 third port expansion boards now available

- 1200 port AND second port of 4800 ~ 38,400 bps
- Most modes/capabilities of the KPC-3 Plus and POCSAG (paging)
- Unique design allows the addition of *another port*, high or low speed
- Remote access, sensing and control capability
- Telemetry transmission capability

KAM '98



New!

- Single Port multimode TNC for HF or VHF use
- All the modes of KAM Plus with addition of A/D inputs/TTL outputs
- HC11 for more processing power to accommodate future upgrades
- Wider range of speeds; use 1200bps packet on 10 meters

KAM Plus



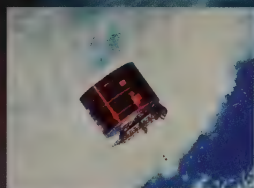
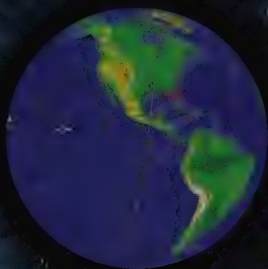
- Dual port VHF/HF (1200/≤300 bps) multimode TNC
- Packet, GPS/APRS, Host, KISS, WEFAX, CW, RTTY, AMTOR, PACTOR, G-TOR™, TOR, and Free Signal Detection for HF e-mail
- 100k personal mailbox standard, expandable with optional 512k RAM
- Remote access capability
- NEWUSER mode and online help

Kantronics

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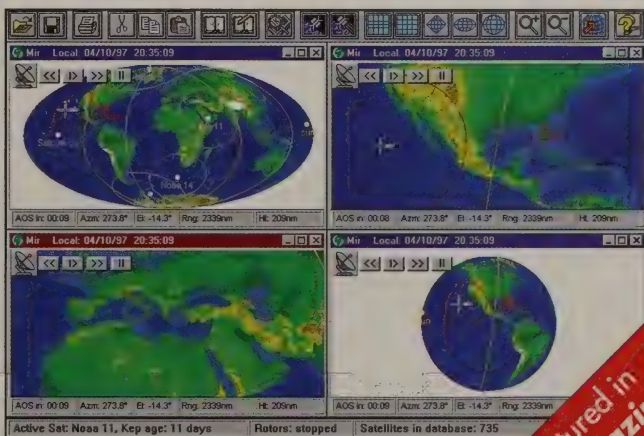
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M-840 SWR & Power Meter

Two 30-segment LED displays show PEP or average power & SWR instantaneously and simultaneously, without calibration – just select the proper power range. Covers 1 to 30MHz with 2, 20, 200 & 2000W power ranges. Shows VSWR 1.0 to 10:1+. Remote sensor with 6 ft. cable. Requires 10-15 VDC @ 800ma. 4 3/4" x 4 3/4" x 2 3/4", 1 lb. **\$189⁹⁵**



PFS-1 Field Strength Meter

Useful field-strength measurements around the ham shack can be made with simple field strength meters that consist of a diode rectifier and a digital voltmeter. But for serious antenna measurements, the PFS-1 has these added features:

- Detector linearized over nearly a 30dB range
- Step attenuator (5dB steps) accurate to 1% over a 30dB range
- Panel meter readable to better than 1dB with an accuracy of about .2dB
- 25dB RF amplifier to provide enough sensitivity so that the meter can be moved out of the near field of the antenna
- High-Q tuned circuit at the input to suppress out-of-band local signals that could degrade the measurements
- Variable attenuator to set measurement levels

Frequency Range: 1.8 to 50 MHz Readout: Front panel analog meter Power: 9V or 12V battery Size: 3" h x 10" w x 4" d, 1 lb. **\$184⁹⁵**



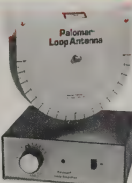
P-508 Active Preset

Installs between receiver & antenna. Covers 200kHz to 30MHz. High-Q tuned circuits reduce or eliminate interfering signals on shortwave bands. New FET-Bipolar amplifier provides over 20dB gain and tolerates strong local signals without overload better than older dual-gate technology. Requires 9 to 15V DC. 2 1/2" h x 7 1/4" w x 2 1/2" d, 0.8 lb. **\$99⁹⁵**



LA-1 Loop Antenna

Picks up less noise than other antennas. Six plug-in loops for various frequency ranges VLF to 15MHz, rotate and tilt to produce sharp nulls that cancel interference and noise. Built-in 20dB preamp compensates for size. 2 1/2" h x 7 1/4" w x 6" d **\$99⁹⁵**



Plug-in Loops for LA-1

Coverage: 40 to 150kHz, 150 to 550 kHz, 550 to 1600kHz, 1.6 to 5MHz or 5-15MHz. **\$99⁹⁵ ea.**

VHF CONVERTERS

Receives and converts the 10 kHz to 500kHz Very Low Frequency band to 80 meters. Two models tune this low range on a General Coverage receiver or Ham Band transceiver. Uses 9V battery. 2" h x 4 1/4" w x 5" d.

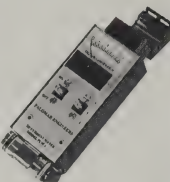
VLF-A Use with Ham Band transceiver. **\$89⁹⁵**

VLF-S Use with General Coverage receiver. **\$89⁹⁵**



PCM-1 RF Current Meter

Measures RF current from 1 to 30MHz. Clamp-on design allows you to check: Radial systems to find broken radials; Antenna and feedline currents; Currents on coax shields and on any wire up to 1/2" diameter. Three Ranges: 100ma, 1 Amp & 5 Amps – full scale. Handheld, portable, 9V battery operated – use right at your antenna. 6" w x 2" h x 2" d, 9 oz. **\$129⁹⁵**



PT-340 Tuner-Tuner

Eliminate QRM, overheated final tubes and devices by adjusting your station antenna tuner without transmitting. Installs permanently between rig and antenna tuner. Just turn it on, and listen to the noise output in your receiver, then adjust your station tuner controls for a dip in the noise (a null). Covers 1.7 to 30MHz. Uses 9V battery. 6" w x 5" h x 3" d. **\$99⁹⁵**



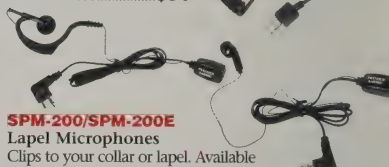
SPM-100

Speaker Microphone Full-sized electret speaker mic. Convenient revolving lapel clip. **SPECIAL \$19⁹⁵**



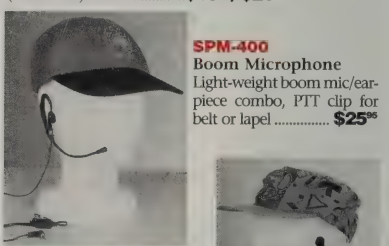
SPM-300 Deluxe Speaker Microphone

Locking PTT, built-in volume control. Lighted transmit indicator. **\$34⁹⁵**



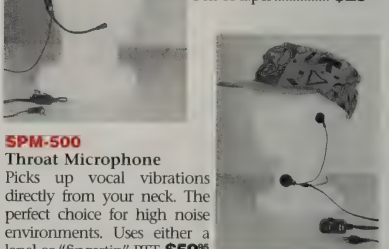
SPM-200/SPM-200E

Lapel Microphones Clips to your collar or lapel. Available with an earbud (SPM-200) or earhook (SPM-200E). **\$18⁹⁵ / \$21⁹⁵**



SPM-400

Boom Microphone Light-weight boom mic/ear-piece combo, PTT clip for belt or lapel. **\$25⁹⁵**



SPM-500

Throat Microphone Picks up vocal vibrations directly from your neck. The perfect choice for high noise environments. Uses either a lapel or "fingertip" PTT **\$59⁹⁵**



RD-78 RD-8 RD-98 RD-9 AL-800

RD-9 7' tall "thin whip", VHF/UHF dualband **\$18⁹⁵**

RD-98 17' tall "thin whip", 2.15 dBi gain on Two Meters 3.2 dBi gain on 70 Centimeters **\$24⁹⁵**

RD-8 6 1/2' tall rubber duck, VHF/UHF dualband **\$17⁹⁵**

RD-78 15' tall rubber duck, VHF/UHF dualband 3.2 dBi gain on VHF, 5.5 dBi gain on UHF **\$22⁹⁵**

AL-800 2-in-1 antenna: 34" telescoping whip which collapses to 10"; 8" "rat tail" antenna. 3.2 dBi gain on VHF, 5.5 dBi gain on UHF **\$34⁹⁵**

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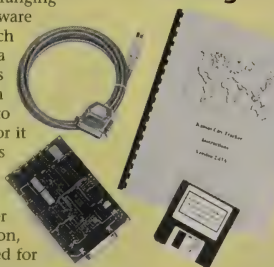
The Kansas City Tracker when used in conjunction with a satellite tracking program, such as *InstantTrack*, can read the azimuth & elevation information generated by this software, and keep an antenna array pointed at the satellite during a pass.

The Kansas City Tracker/Tuner is an 8 bit PC board which will operate in an open ISA slot, in IBM Compatible computers, ranging from XT's to Pentium systems. It does not use any hardware interrupts or COM ports. It has its own DB25 type port, which is used to connect to both a rotor controller and either a dual band radio or two single band radios. An 8 ft. cable is provided, with a DB25 connector on one end, and an 8-pin DIN connector on the other. This cable can be used as is, to connect to a YAESU/KENPRO 5400/5600 rotor controller, or it can be modified, using instructions provided, for other types of controllers.

The Kansas City Tracker option consists of additional components on the KCT board and cannot be added after purchase. These components allow for Doppler compensation, primarily for digital satellite work. Instructions are provided for connecting a user supplied cable to the DB25 end of the KCT cable, for interfacing to either the serial port or mic-click input of the radio. This requires the use of an additional satellite tracking program such as *Quiktrak* or *WiSP*. There is no need to purchase a TTL to RS232 converter for your radio. The KCT can be switched to either type of output.

Kansas City Tracker GRAKCT \$229⁹⁵ • Kansas City w/Tuner Option GRAKCT/T \$319⁹⁵

L.L. Grace Communications Kansas City Tracker Automatic Satellite Tracking



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The Dot Matrix display is one of the best we've seen in a while.
Best Two tone, third order dynamic range"

Mar. 98 QST

AT-600 DUAL BANDER



Maximum performance for the budget-conscious amateur - that's ADI's 2m/70cm AT-600. Easy to learn!

- Tx 144-148 & 430-450MHz
- Rx 130-174 & 400-470MHz, also Rx 900-985
- 108-137MHz AM air Rx • MARS/CAP capable
- Simultaneous VHF/UHF receive or singleband operation
- Crossband repeat
- Separate VHF/UHF volume & squelch controls for each band
- Alphanumeric, Frequency, Channel display
- 200 memories store any offset or tone
- CTCSS encode and decode included
- 10 DTMF/autodialer memories
- DTMF paging included
- Auto Power Off & Battery save
- 2.5w & 5w versions available
- Small! 5.5" x 2" x 1.5"
- PC programmable
- Backlit key pad and display
- Battery voltage meter function
- Wireless Cloning

AT-201/2m
AT-400/70cm



- 40 memories store any offset or tone
- Tx/Rx 144-148 Rx expands to 130-179MHz (AT-201)
- Tx/Rx 430-450 Rx expands to 400-480(AT-400)
- Cloning function
- Programmable band, memory, 1 MHz scan
- Manual or automatic Tx offset
- CTCSS encode & decode included
- Dual Frequency Watch
- Call Channel
- Frequency or Channel display
- Backlit LCD & keypad
- MARS/CAP capable
- DTMF paging included
- 2.5w & 5w versions available
- Small! 5.5" x 2.0" x 1.3"

Loaded with features! A true dual bander!

AR-146 & AR-446 MOBILES



"Best receive sensitivity"
"Best Adjacent channel rejection"
"Best IF rejection"
"Lowest street Price"

Nov. 96 QST

- Tx/Rx AR-146: 144-148 Rx extends to 130-180MHz
- Tx/Rx AR-446: 430-450 Rx extends to 420-480MHz
- Power: AR-146: 50/10/5w. AR-446: 35/10/5w
- MARS/CAP capable
- 40 memories store any frequency, offset or CTCSS tone
- Programmable band and memory scanning
- Dual Frequency Watch
- CTCSS encode and decode included
- DTMF paging included
- DTMF decode & display
- Multi Function DTMF mike
- Tx timer & auto power-off
- Frequency or channel display
- 4 step display dimmer
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PR-52 (6 Meters)



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Up to 5 watts output, 41 memories, huge display. DJ-190 (no keypad) also available.



■ DJ-G5T 2m/440 HT

Up to 5 watts output, Channel Scope™, 100 memories/band, CTCSS encode and decode, RF attenuator, 13.8 vdc input port, V/U, V/V, U/U, U/V, programmable 2nd PTT, AM air band receive, full duplex and cross band repeat capabilities



■ DJ-C1T 2m HT, DJ-C4T 440 HT

"Credit card" size, 300 mw output, 21 memories, lithium-ion battery soft case, quick charger, earphone all included! DJ-C1T also includes AM air band receive.

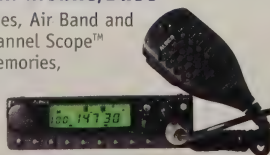


■ DJ-S11T 2m HT, DJ-S41T 440 HT

"Pager Size", 340 mw output, 21 memories, uses AA, NiCd or external power, Easy to operate and program, great tx and rx audio, fits in pocket or purse! Check the low price!

■ DR-150T, DR-150TQ 2m Mobile/Base

50 watts output, 100 memories, Air Band and UHF (440 ~ 450 Mhz) RX, Channel Scope™ display, 2 VFOs, auto dial memories, 9600 packet port, H/M/L output, DR-150TQ includes CTCSS decode.



■ DR-140T, DR-140TQ 2m Mobile/Base

50/5 watts output, 51 memories, alphanumeric display, AM air band receive. DR-140TQ includes CTCSS decode.



■ DR-610T, DR-610TQ 2m/440 Mobile/Base

50 watts VHF, 35 watts UHF, Channel Scope™ display, 120 memories, detachable face, V/U, V/V, U/U, U/V, RF attenuator, two VFOs, H/M/L output, AM air band receive, internal duplexer, 9600 packet port, DR-610TQ includes CTCSS decode.



■ DR-605T, DR-605TQ 2m/440 Mobile/Base

50 watts VHF, 35 watts UHF, 51 memories each band, "set and forget" squelch, UHF TX range of 430 ~ 449.995 MHz allows for satellite work, internal duplexer, 9600 packet port. DR-605TQ includes CTCSS decode. **The value leader in dual band mobiles!**



■ DR-M06TH 6m FM Mobile/Base

50~54 MHz, 100 memories, 20 watts output. Work repeaters or simplex, includes CTCSS encode (decode optional), DTMF mic.



■ DX-70T, DX-70TH HF + 6m Mobile/Base/Portable



160m ~ 6m Amateur Band TX in all modes, general coverage RX 150 KHz ~ 30 MHz and 50 ~ 54 MHz, 2 VFOs, 100 memories, removable face

for remote mounting, speech compressor, SSB, CW and AM narrow filters, full, semi or automatic break-in, multi-function control, RIT, TXIT, easy split operation, RF gain, CTCSS for 10 and 6m repeaters. Both models feature 100w output on HF, DX-70TH has 100w output on 6m, DX-70T has 10w output on 6m.

■ DX-77T HF Desktop Transceiver

160 ~ 10m Amateur Band TX in all modes, general coverage RX 500 KHz ~ 30 MHz, 2 VFOs, internal keyer (6 ~ 50 wpm), 100 memories, 13.8 VDC input, optional computer control capability, CTCSS encoder (front panel programmable), RIT, easy split operation, speech compressor, selectable AGC, large front panel speaker. **The value leader in HF desktop radios!**



■ DM-340MVT DC Power Supply

30 amps nominal, 35 amps peak, 0~15 VDC variable output, meters included at no extra cost, convenient front panel connections, output connections include binding posts, spring clips and cigar lighter, circuit protection, perfect for base station operation or bench testing.



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The way it works is very simple. Every time a Club Member buys something from AES, at our everyday low prices, AES will allow the club 1% of the invoice total towards a purchase. In simple terms, your club member saves by buying at AES and your club accumulates *Free funds* for equipment, etc.

The accrual period is one year, starting September 1, 1997, ending September 1, 1998. You can use it before that time but it does not carry over from year to year. If the item or items total more than what is in the fund the club may pay for the difference. All requests for merchandise must be on a club letterhead and, if there is a difference, paid for with a club check.

Starting now, have your club members turn-in a copy of their AES purchase invoices to a club representative. Have him throw all those receipts in a box and start building the fund (based on 1% of those invoices) toward the radios, antennas or whatever the club needs.

Talk this up at every membership meeting, breakfast, or wherever you see each other and start getting them involved. With just a little effort your club could acquire a significant amount of new equipment virtually FREE!

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Mike Hansen

Mike Hansen, N9LBQ
AES Sales and Marketing

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AH-50 6 Meter Transceiver

Features:

- Complete Band Coverage (50 to 54 MHz)
- Backlit LCD Information w/Function Indicators
- Frequency Scanning scans the entire 6M band
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- Selectable 1 Watt Low Power Mode
- CTCSS Tone Frequencies for Privacy
- Sealed Rechargeable Nickel Cadmium Battery Pack Included
- Five Programmable Memories for Quick Access
- Full Normal and Reverse Repeater Functions
- Battery Power Saver Feature with Low Battery Indication
- Optional MA-27 adapter allows Mobile Operation
- Full One Year Warranty
- Convenient Small Size: 6" h x 2 1/2" w x 1 1/4" d
- Accessories Include: Flexible Antenna, Ni-Cad Battery Pack, Power Adapter, Battery Charger, Belt Clip and Wrist Strap

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IC-706MKII

HF + 6M + 2M • 100 Watts (HF + 6M), 20 watts (2M) • All Mode • Remoteable Front Panel* • DSP* • Up to 3 Front Panel Filter Selections* • 2 Antenna Connectors

*Optional equipment required

IC-707

HF • 100 Watts • All Mode • 100% Duty Cycle • Rugged Construction • Large, One Function Keys and Dials • Front Facing Speaker • Compact Size • ICOM's Most Affordable HF

IC-746

HF + 6M + 2M • 100 Watts on All Bands • All Mode • IF-DSP • Noise Reduction • Auto Antenna Tuner • Band Scope • 3 Antenna Connectors • Twin Passband Tuning • Auto Notch Filter • Audio Peak Filter • RF Speech Processor* • Up to 7 Front Panel Filter Selections* (3 filter slots)

*Optional equipment required

IC-756

HF + 6M • 100 Watts on All Bands • All Mode • IF-DSP • Noise Reduction • Twin Passband Tuning • Auto Antenna Tuner • True Dual Watch • Real Time Band Scope

IC-775DSP

HF • 200 Watts • Built-In Power Supply • All Mode • IF-DSP • Noise Reduction • Auto Antenna Tuner • Auto IF Notch Filter • Level/Width Variable Noise Blanker • PSN Modulation • Twin Passband Tuning • Audio Peak Filter • 3 Antenna Connectors • Dual Receiver • Twin Tuning Knobs

IC-781

HF • 150 Watts, Built-In Power Supply • All Mode • Complete & Fully Equipped: No Options Needed, Not Even Filters • CRT with Real Time Band Scope

IC-PW1

1 KW Amplifier • HF + 6M • Removable, Remoteable Control Head • Auto Band Changing • 4 Antenna Connectors • Auto Antenna Tuner • 3 Cooling Fans

See the IC-PW1 at Dayton '98

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HANDHELDS

IC-T2A

2 Meter Single Bander • 4.5 W • Rugged Aluminum Chassis & Polycarbonate Case • Built-In Tone Squelch with Pocket Beep and Tone Scan • 8 Programmable Keys • 43 Memory Channels • Uses 8 "AA" Ni-Cd (included) or Alkaline Batteries • Affordable • 2.3"(W), 5.5"(H), 1.3"(D), 10.9 oz



IC-T22A/IC-T42A (2M/440 MHz)

Single Bander • Fun, Shirt Pocket Small and Easy to Use • Large Alphanumeric Display • Wide Receive Coverage, Including Air Band • 5 W @ 13.5 V (3 W Out of Box) • Air Band Receive • 80 Memory Channels (40 w/Alpha Display) • 2.3"(W), 4.3"(H), 1.1"(D), 10.9 oz

IC-T7AHP

2 Meter/440 MHz Dual Bander • Dual Bands at a Single Bander Size & Price • Very Easy to Use—No Function Key • Works One Band at a Time, Switch Between Bands with One Touch of the Band Key • Now 4 W (2M)/3 W (440) Out of the Box with BP-173 • "Intuitive" Help Display • CTCSS Encode/Decode • Very Affordable • 2.5"(W), 4.8"(H), 1.1"(D), 11.3 oz



IC-Q7*

2 Meter/440 MHz Dual Bander • Extended Rx 30-1300 MHz (cellular blocked), Airband Receive Broadcast FM and AM Receive (most TV stations, too) • 300 Mw Transmitter • 200 Memories • Uses "AA" Alkaline or Ni-Cd Batteries • Rugged Construction • Tone Squelch • Easy to Use • Splash Resistant • 6-25 KHz Channel Step • Full Scanning Capability • Receiver Attenuator • Power Save Feature • 2.3"(W), 3.4"(H), 0.98"(D) (Shown with optional antenna)

IC-W32A

2 Meter/440 MHz Dual Bander • 5 W Out of the Box • No Function Key • PC Programmable • 200 Memories with Alphanumeric Display, Messaging & Paging • "Intuitive" Help Display • Backlit Display and Keypad • Wide Band RX (Including Air Band) • V/V, V/U, U/U Operation with VHF/UHF Tuning Knob Exchange • Encode/Decode • PC/Radio-to-Radio Cloning • 2.2"(W), 4.9"(H), 1.2"(D), 12.0 oz



IC-T8A

6 Meter/2 Meter/440 MHz Tri Bander Handheld • Worlds Smallest! • Super Thin Profile/Lightweight Design • Up to 5 Watts Power on All Bands (13.5 V DC) • 4.5 Watts Out of Box with Supplied BP-200 Battery • One-Touch Band Switching • Ni-MH Powered! • RX (MHz): 50-54 (6 meters), 118 - 174 (2 meters), 400 - 470 (440 MHz) Broadcast FM and AM Receive (most TV stations, too) • Airband Receive • 123 Memory Channels with 10 Scan Edges and 1 Call for Each Band • MIL SPEC 810 C/D/E • Tone Squelch with Pocket Beep • Backlit Display with Timer • Built-in Guide Function • JIS Grade 4 Water Resistance • Wall Charger Included • DTMF Encoder with 9 DTMF Memories • Handheld to Handheld Cloning Capability or PC Programming Capability** • 2.3 (W), 4.3 (H), 1.2 (D), 9.9 oz

MOBILES

IC-2100H



Optional Infrared Wireless Mic

The HM-90 infrared optional wireless mic works with the new IC-2100H, IC-207H** and the more advanced IC-2710H. Enjoy cable-free operation on the GO!

2 Meter • 55/10/5 Watts (selectable) • TX 144-148 MHz • RX 136-174 MHz • 75 db/93 db IMD • 113 Memory Channels • Heavy Duty, One Piece, Die Cast Aluminum Chassis • MIL SPEC 810 C/D/E Shock/Vibration • Front Panel Programmable Alphanumeric Display • PC or Radio to Radio Cloning** • DTMF Microphone (HM-98S) • CTCSS Encode/Decode Standard—50 Tone Frequencies • Independently Programmable Tx/Rx • Tone Scan • Auto Repeater with Busy Lockout • Priority Watch (3 types) • 5.5"(W) x 1.6"(H) x 7.1"(D), 2 lb 10 oz

IC-2710H



2M/440 MHz Advanced Dual Bander • 2M (50 W)/440 MHz (35 W) • Detachable Control Panel** • Fast Scanning • 220 Memory Channels • PC Programmable • CTCSS Encode (decode optional) • RF Attenuator • 8 DTMF Memory Switches • v/v, u/u Simultaneous RX • Built-In Duplexer • 3 Selectable Power Levels: 50 (35), 10, 5 • 5.5"(W), 1.6"(H), 8.4"(D), 3.1 lb

IC-207H



2M/440 MHz Dual Bander • 2M (45 W)/440 MHz (35 W) • Super Compact Detachable Control Panel** with Big Keys, Big Knobs and a Big Display • Work One Band at a Time • 9600 Baud Ready • Wide Band RX (Includes Air Band) • CTCSS Encode/Decode • Very Affordable • 5.5"(W), 1.6"(H), 8.1"(D), 2.6 lb

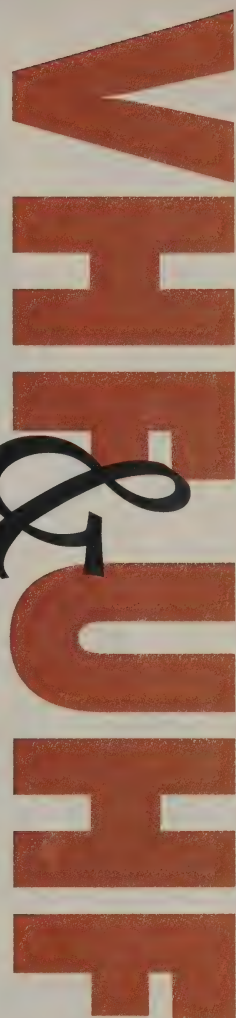
BASE STATIONS



IC-821H 2M/440 MHz Advanced Satellite & Digital Base Station • All Modes • Easy to Use! • Continuous Adjustable Transmit Power • Sub Band Transmit • 9600 Full Compatibility Out of the Box • 160 Memories • Noise Blanker & IF Shift on Main & Sub Bands (independent main/sub RX) • Built-In Electronic Keyer • Satellite Tracking with Doppler Correction • Compact! 9.5"(W), 3.7"(H), 9.4"(D), 11.0 lb

"By far the easiest to use satellite radio on the market today. In less than 10 minutes after unpacking the 821H, I was on the air at 9600 baud with KO-23"
— Michael Wyrick, N4USI, AO-27 Control Operator

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HEIL PRO-SET Boomset Headphones

A rugged, lightweight boomset designed for long wearing time during contests, etc. The headband has detents on each side for adjustment, and is fully padded for comfort. The vinyl earpads are also heavily padded, seal out noise, and are removable for washing. The flexible microphone boom adjusts to about any location and folds up for storage. Includes a HEIL HC-4 or HC-5 microphone cartridge (below)..... **\$131⁹⁵**

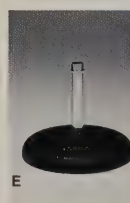
AD-1 Adapter Cables (D) for use with ICOM, KENWOOD, TENCOR or YAESU transceivers..... each **\$14⁹⁹**

HEIL PRO-MICRO Boomset Headphones

The Pro Micro is the newest addition to the Heil Pro line. It replaces the old BM-10 and BM-5 series headsets. It is simply a miniature version of the Pro Set. It's main feature besides being smaller and lighter weight is that it does not cover the entire ear. Hams sometimes want to hear their surroundings. Using the Heil Pro-Micro can allow you to do that. Available with the HC-4 or HC-5 element (below)..... **\$105⁹⁵**

AD-1 Adapter cables (D) for use with ICOM, KENWOOD, TENCOR or YAESU transceivers..... each **\$14⁹⁹**

info@heilsound.com



B
Cable is optional

PRO 5 Boomset (A) Concerned about covering both ears? – the Pro 5 was created. Provides all of the same quality and performance as the Pro Set with out covering the right ear. Available with either the HC-4 or HC-5 element (below). Use AD-1 adapter (above), specify HC-4 or HC-5..... **\$120⁹⁵**

HM-10 Microphone (B) A hand-held studio-style microphone with desk stand or boom mount options. Choice of HEIL cartridges. Operate PTT or VOX, it's designed to work with virtually any late model transceiver. When ordering specify HC-4 or HC-5 cartridge (below)..... **\$63⁹⁵**

HM-10 DUAL Microphone (C) The ultimate microphone. Versatile in that it has both HC-4 DX element and HC-5 Full Range microphone cartridges built-in – and switch selectable for varying conditions..... **\$112⁹⁵**

HM-10 CABLES (not pictured) Designed to work with any transmitter. When ordering specify your radio and the HM-10 will be shipped with the correct color coded cables. Specify for ICOM (HEI CC11), KENWOOD (HEI CC1K) or YAESU (HEI CC1Y)..... **\$25⁹⁹**

TB-1 Table Base (E) For HM-10 series microphones. 6 inches high, heavy (2 lb., 10 oz) cast metal base with non-skid cork feet. **\$19⁹⁵**

MA-1 Boom and Clamp Assembly (F) For HM-10 series microphones. The boom is adjustable from 6 to 24 inches and attaches to desk or shelf, or hangs from ceiling. Swivels a full 360° and places HM-10 or DUAL TEN microphone exactly where you want it. You can use the FS-1 footswitch for convenient, hands-free PTT operation..... **\$49⁹⁵**

FS-1 Foot switch (G) Provides convenient foot-control of PTT function of any transmitter. Non-skid rubber pad on both top and bottom, supplied with 7 ft. cable and 1/4" phone plug. **\$26⁹⁵**

HEIL MICROPHONE CARTRIDGES

Most microphones today were designed for PA – not for SSB, with the frequency response needed for busting pile-ups, or providing maximum voice clarity. If you aren't satisfied with the "sound of your station", you can solve this problem by replacing the cartridge in your microphone with a Heil Key Element for a dramatic improvement. It's tiny in size, and easily replaces existing cartridges in most microphones.

HC-4 – The DX Dream Machine

The replacement microphone cartridge for Contest and DX operators. It's engineered with a high-pitched, pile-up busting frequency response of 500Hz to 3800Hz with a 10dB peak at 2000Hz, and a sharp 12dB per octave roll off at 500Hz. It provides your rig with excellent clarity and more punch for getting through the pile-ups. Impedance: 2000Ω @ 1000Hz – works well into low (500-600Ω) and medium (2k-5kΩ) impedance inputs. Cardioid shaped pick-up pattern. Size: 0.530" d x 0.850" w x 0.310" h..... **\$29⁹⁵**

HC-5 – The Key Element

The ideal replacement microphone cartridge for everyday Rag Chewing. Engineered with full range articulation and maximum voice clarity. Not mushy, bassy paging-type audio, but very clear, easy-to-understand SSB audio. Response: 350Hz to 4000Hz with a sharp roll-off under 300Hz and above 3100Hz with a peak at 2100Hz. Impedance: 2000Ω @ 1000Hz – works well into low (500-600Ω) and medium (2k-5kΩ) impedance inputs. Cardioid shaped pattern. Size: 0.530" d x 0.850" w x 0.310" h..... **\$29⁹⁵**

In-Line Microphone Preamplifier for use with ICOM Transceivers



Model HMP Provides 8 dB of overall gain and 4 dB of equalization at 1500Hz to produce very articulated transmit audio from all ICOM transceivers – a dramatic improvement! An 8-pin plug is attached to the 6" cable coming from HMP and is mated to the ICOM pin outs. Accepts the 8-pin plug from a Heil CC-1 and AD-1 adapters. Operational 8V DC is derived from the microphone input of the ICOM while passing through the push-to-talk line. The **HMP-M** has a modular plug to mate to the ICOM modular connector radios, such as the IC-706, 706MKII..... **HMP or HMP-M \$54⁹⁹**

Meet the Kenwood Family



UBZ-LF14
FRS



TH-235A
2 meters



TH-22AT
2 meters



TH-G71A
2 meters
& 440 MHz



TH-79AD
2 meters
& 440 MHz



VC-H1
Visual
Communicator



TM-261A/461A
2 meters/440 MHz



TM-331A
220 MHz



TM-G707A
2 meters & 440 MHz



TM-V7A
2 meters & 440 MHz



TM-541A
1200 MHz



TM-742AD/642AD
2 meters & 440 MHz/2 meters & 220 MHz



TS-50/60
HF All Mode/6 meter All Mode



TS-50/60
HF All Mode



TS-570S
HF & 6 meter All Mode



TS-700A
2 meters & 440 MHz All Mode



TS-870S
HF All Mode



TS-950SDX
HF All Mode

KENWOOD
Amateur Radio Products Group

KENWOOD COMMUNICATIONS CORPORATION
AMATEUR RADIO PRODUCTS GROUP
P.O. Box 22745, 2201 E. Dominguez St., Long Beach, CA 90801-5745, U.S.A.
Customer Support/Brochures (310) 639-5300



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Kenwood News & Products
<http://www.kenwood.net>

Seeing is Transceiving

Portable SSTV is here! Kenwood's new VC-H1 Visual Communicator combines an image-scan converter, CCD camera and LCD monitor in a compact battery-operated unit. Simply hook it up to your Kenwood transceiver to start sending and receiving color images over the air.

VC-H1 Visual Communicator

► Ideal for outdoor SSTV

Until now, for anyone interested in SSTV (slow-scan television), portability has not been an option. But thanks to component miniaturization the VC-H1 is not only small enough for handheld use but it runs off 4 AA batteries so you can take it anywhere. This makes it ideal for field days, special events, disaster communications and even fishing trips.

► Full compatibility

The VC-H1 can be connected to any transceiver with just a cable, and it offers full compatibility with all of the standard SSTV formats. Uploads/downloads are quick and easy; the images are also sharp and clear.

► All-in-one design

In addition to the detachable 1/4-inch CCD camera, the VC-H1 features a 1.8-inch color TFT (thin film transistor)-type display. As well as viewing incoming pictures, you can review your own prior to transmission. The built-in microphone & speaker can be used in place of a separate speaker-microphone for your transceiver.

► Image memory

Up to 10 pictures can be stored in memory. This allows you to compare and pick the best shot to send. You can also store incoming pictures and protect them from unintentional deletion.

► Computer connectivity

One of the great features of the VC-H1 is the ability to work with a personal computer. Hook it up to the RS-232C port on your laptop using the optional connection kit (includes Microsoft® Windows® 95 software) and you can save pictures (in JPEG format) that you send and receive. You can then cut and paste using standard graphics software, or even superimpose your own text. What's more, you can actually control the VC-H1 from your computer.

► Call sign superimpose

► AF mute

► Auto power-off

270,000-pixel CCD image sensor

1.8-inch TFT-type color display

Microphone & speaker

360-degree rotatable camera head (detachable)

Operates on 4 AA alkaline batteries

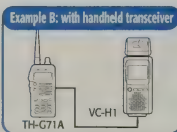
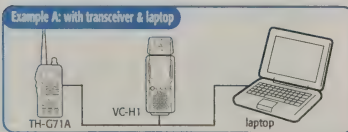
SPECIFICATIONS

• Terminals: Data I/O (for transceiver), Video in, Video out, COM (for computer), DC IN (4.8 - 7.0V) • Dimensions, projections not included (WxHxD): 2-5/8 x 1-3/8 x 6-3/4 in (62 x 30 x 160 mm)

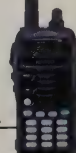
Specifications are subject to change without notice.

Screen-shot photographs are simulated.

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TH-G71A
144/440MHz
FM Dual Band



- 6W (VHF), 5.5W (UHF)
- PC programmable
- 200 memory ch. with alphanumeric display
- MIL-STD 810E (rain & shock)
- CTCSS tone scan
- DTMF memory (10 ch. up to 16 digits)
- Wide-range coverage



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JQA-1205

Communications Equipment Division
Kenwood Corporation
ISO9001 certification

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AMATEUR RADIO PRODUCTS GROUP
P.O. Box 22745, 2201 E. Dominguez Street
Long Beach, California 90801-5745, U.S.A.
Customer Support/Brochures (310) 639-5300

Shoot for the Stars

Kenwood's TS-570D/S(G) HF Transceiver incorporates an Advanced Technology Upgrade that propels your operating experience beyond the galaxy.

NEW!
Sky Command Operating System
(See your dealer for details)

Advanced Technology
Upgrade

TS-570D(G) HF TRANSCEIVER/TS-570S(G) HF + 6M TRANSCEIVER

Kenwood has not been standing still since the introduction of the TS-570D/S HF Transceiver last year. Now you can command even more of Kenwood's advanced DSP technology with the G model.

The **DSP** filters and extracts signals with digital technology that is unmatched with standard analog circuits. It provides **CD-class transmit and receive audio quality** that can be shaped to your needs, and two powerful noise reduction systems: **Line Enhancer Method** for SSB/AM modes, and **Speech Processing by Auto Correlation (SPAC)** for CW mode. DSP also enables the **CW-Auto Tune** feature that automatically zero-beats CW signals.

The **Extensive Memory Functions** provide a bank of 100 memory positions split into 90 standard channels for general operation and 10 for programmable VFO, programmable scan and long-term memory. Memory contents can be scrolled, copied or locked out. In addition there are **5 quick memories** for storing frequencies and modes on the fly, perfect for the busy DX contest.

The powerful **Menu System** incorporates **46 menu features** and an **on-line guide** for instant reference. The **large amber backlit LCD display** provides 4 light levels for clear readability under any lighting conditions.

The TS-570D/S has no shortcomings in the construction and performance area. The **continuous-duty 100 watt transmitter** incorporates a large

heavy-duty heat sink with integrated cooling fan for non-stop operation even under extreme environmental conditions. The **wide-band receiver** is rock-stable from 500 kHz through 30 MHz with **dual pre-amps** and **dual bandpass filters** for exceptional selectivity and sensitivity.

With the features and performance of a high-end radio integrated into an affordable mobile-size package, the TS-570D/S is the perfect choice for the field or to build a full station around at home.

- ▶ Beat cancel
- ▶ 2 position antenna switch
- ▶ CW auto tune adjust (a world's first)
- ▶ Channel scan, program band scan, memory scan with channel lock-out and group channel scan, all with TO (time operated) or CO (carrier operated) resume modes
- ▶ Compact 10-5/8 inch by 3-3/4 inch front panel size for any travel or installation requirement
- ▶ Preset auto antenna tuner with 18 sub-bands
- ▶ Variable electronic keyer (0 and 100 wpm)
- ▶ Packet and FSK features
- ▶ RCP-2 software for PC-based display and memory configurations available via the Internet
- ▶ Full functionality on 6M (TS-570S) including DSP, 100 watts output and preset Auto Antenna Tuner
- ▶ QRP output adjustable from 5 to 100 watts

TS-570D/S (G) new features

- TX sound quality monitor with 9-step monitor volume for absolute control over voice quality
- NR1 (SSB) is operator controllable in 9-step increments, or automatically tracks input signal strength
- New CW DSP Filters (80 Hz, 150 Hz and 500 Hz) give you a total of 11 user-selectable filters
- NR1 and NR2 settings can now re-configure automatically when changing mode groups (SSB/AM/FM to CW/FSK)
- Manual weight feature (with built-in electronic keyer) for adjusting the relative length of dots and dashes in 16 steps between 1:2.5 and 1:4.0
- Equalize receive signals, and use different settings for both TX and RX
- "One-touch" DSP filter wide mode allows "resurfacing" to check the band conditions when operating in narrow mode
- Dual selectable Beat Cancel (BC) works against intermittent beat interference (except in CW mode)
- CW auto tune mode links only with the RIT frequency without changing the transmit frequency.

Advance Technology Upgrade is available in new production models and for pre-existing TS-570D/S; contact your dealer for details



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Full Line of *quality* Handheld Accessories...

UNIVERSAL CHARGER

MH-C777 *Universal* Rapid Charger

Conditioner

- ✓ Will charge **nearly any type of rechargeable NIMH and NICD battery pack!**
- ✓ Will **discharge** and **condition!**
- ✓ Latest **-dV** and **temperature** Detection
- ✓ Support **4.8-12V**
- ✓ For mobile and base use!
- ✓ **Free car adapter included!**

Charge nearly all of your amateur radio battery packs with it, plus more.....

Cellular, Notebook Computer, Two-Way Radio, and more!

The breakthrough adjustable contacts make it truly universal!

The MH-C777 will not only charge your battery but also condition it!

External magnetic temperature probe!

Powerful magnet that will hold your battery pack in place!



1000mAh



MH-PB-34
For Kenwood TH-79/22/42
900mAh, 9.6v

1800mAh



MH-FNB-V47
For Yaesu FT-50R/10R/40R
1800mAh, 7.2v

1000mAh



MH-BP-180
For Icom T7A/T22A/W32
1000mAh, 7.2v

NiMH BATTERY PACKS

- ✓ **New technology**
- ✓ **No** memory effect
- ✓ 50-100% **more** capacity than same size NiCad
- ✓ **Light** weight
- ✓ Flat Discharge Curve
- ✓ **Small** Size
- ✓ Environmental **friendly**
- ✓ Many **other** models available
- ✓ **One** Year Limited Warranty for all battery packs

MAHA

*"Your Supplier, Your Partner,
Your Friend!"*

PATCOMM PC-9000

Patcomm Corporation is proud to announce the creation of their new compact HF Transceiver; The PC-9000. This new, small, rugged (all aluminum), simple to use HF (plus 6 meters) transceiver should find a welcome home in every Ham Shack. With a low power (5 watts) setting for QRP, a high power position (40 watts) for most communications (and sufficient to drive most amplifiers) and six meter capability, here's a rig that can do it all. Small enough for mobile use and rugged enough for field operations, the PC-9000 doesn't require an engineering degree to operate.

Standard features include:

- SSB and CW on 160 thru 6 meter ham bands
- Three selectable tuning rates; 1.2kHz, 12kHz, and 120kHz
- Highly effective noise blanker
- Frequency lock button
- Low noise, high selectivity receiver design with 2.4kHz crystal filter, and variable (400-2500Hz) SCF filter in the audio stage

Phone: (516) 862-6511 ■ Fax: (516) 862-6529

7 Flowerfield M100, St. James, NY 11780



- RIT/SPLIT capability
- Amplifier control jack
- 5 watt and 40 watt outputs (20 watts on six meters)
- Built in keyer and keyboard interface for CW
- Fast/Slow AGC settings
- Rugged, all aluminum construction
- Compact size; 8W, 2.75H, 7.5D
- Requires 12VDC

Optional features:

- Plug-in FM module
- Plug-in RTTY/Memory decode (and RTTY send) functions as well as Direct Frequency Entry (from external keyboard) and memory storage.

patcomm
Designed and Built in the USA



AT1500 (bottom)

A solidly constructed high power antenna tuner using 10 ga. (.090) aluminum for the case and a "beefed up" roller constructed from 10 ga. tin plated wire on a DELRIN coil former. Designed by Paul Hrivnak (founder and former owner of "VECTRONICS") this unit is built to last.

- Matches dipoles, center fed doublets, G5RV's balanced feeders, Verticals, single wire, delta loops beams, windoms, Inverted V's
- Built in 4:1 balun for balanced wire feeders
- Bypass position for quick straight through antenna connection but still with SWR/POWER monitoring
- 6 position antenna selector switching
- Average power reading to 3000 watts
- Standing Wave Radio measurements with an illuminated cross-needle meter

SPECIFICATIONS

- Frequency1.8-30MHz
- Power Rating1000W single tone
1500W pep
- Antenna Matching2 air variables (4.5kv)
Rotary Inductor with 10 ga. wire
- MeterDual crossneedle yellow face,
9-12dc for lamp
- BalunRuthroff 4:1 balun included
- Dimensions4.5"H x 12.5"W x 11.5"D
- Weight11.5 lbs.
- ApprovalsCE approved

\$379⁹⁵

AT300 (top)

A compact antenna tuner that provides adjustable impedance matching for all types of antenna. It measures power & SWR using illuminated frequency compensated SWR/POWER single analog meter. CN model (middle) has cross-needle meter. Using a 48 position switched toroidal inductor with silver plated double contacts it is possible to easily adjust for low-est possible SWR ratio on the selected transmit or received frequency.

- Matches dipoles, center fed doublets, G5RV's balanced feeders, Verticals, single wire, delta loops beams, windoms, Inverted V's
- Built in dummy load
- Built in 4:1 balun for balanced wire feeders
- Bypass position for quick straight through antenna connection but still with SWR/POWER monitoring
- 8 position antenna selector switching
- Average power reading to 200 watts
- Standing Wave Radio measurements with easy SET function

SPECIFICATIONS

- Frequency1.8-30MHz
- Power Rating200W single tone
- Antenna Matching2 air variables (1.5kv)
Rotary 48 turn Inductor with 18 ga. wire
- MeterSingle analog, 9-12dc for lamp
- BalunRuthroff 4:1 balun included
- Dimensions3.25"H x 7"W x 7.5"D
- Weight3 lbs.
- ApprovalsCE approved

\$129⁹⁵ • CN model - **\$139⁹⁵**



PALSTAR INC.

9676 N Looney Rd.
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Great Amateur accessory products designed and manufactured in Ohio by Paul Hrivnak, former founder-owner of "VECTRONICS". With superior materials and attention to detail, these products are built to last and give you the most value for your money.

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Model SG-2000 HF SINGLE SIDEBAND GLOBAL RADIO TELEPHONE

FULL FREQUENCY COMMUNICATIONS FOR VOICE AND DATA

Make contact anywhere with the power-packed SG-2000 – a rugged HF transceiver with 1.8 to 30MHz coverage and 150W PEP output. Engineered for simple and efficient operation, the SG-2000 features an alarm generator, upper/lower sideband, true amplitude modulated (AM) receiver and channel scan as standard features.

Talk anywhere in the world on the HF Ham bands, receive and send time sensitive documents, decode UPI transmissions, get the latest weather report or listen to shortwave broadcasts from around the world. Great for marine, highly stable and rugged.

Exceptional features include 644 factory programmed ITU voice and data frequencies plus 100 field programmable channels. Scan all ITU channels and up to 100 memory channels in adjustable scan speeds and rates. An extra large liquid crystal, wide angle display with adjustable backlighting provides easy viewing day or night.

Optionally, the SG-2000 can be fully computer controlled by any standard RS-232 protocol connector to allow easy flow and management of data communications on RTTY, ARQ (SITOR), FEC, Packet and telegraphy modes. Fast RX/TX switching time ensures easy and secure data transmissions.

The compact front panel of the SG-2000 can also act as the remote head terminal, and up to 8 full function remote heads can be utilized. The remote heads can be mounted flush with the bulkhead so they do not intrude on people space and the high-impact, abrasion and water resistant housing will stand up well in the toughest environments. The optional universal 5-way head mount orients the control head in any direction, for easy viewing & operation.

The **PowerTalk™ SG-2000** has all of the features of the SG-2000 but incorporates **ADSP (Adaptive Signal Processing)** & **SNS (Spectral Noise Subtraction)** technology packed in a slim, state-of-the-art, control head to drastically reduce noise, providing unsurpassed signal quality. **SGC 04-01**

See Price List for selection of accessories for the SG-2000 & other models



- Power Output: 150 watts PEP
- Transmitter frequency range: - 1.8 to 30 MHz
- Receiver frequency range: 500kHz to 30 MHz
- Modes: A3A, A3H, A3J and CW in LSB and USB, true AM in receive mode & data.
- Channels: 100 channels field programmable, 644 channels factory programmed ITU and data.
- Scan Channels: Up to 100 scan channels programmable in 10 groups
- Power Requirement: 13.6 VDC; 0.8A RX – 16A TX (voice)
- Size: 4 1/4" h x 10" w x 15" d • Weight: 12 lbs



Model SG-2020 HF TRANSCEIVER

The SG-2020 is designed as a small, low power, low cost SSB/CW HF companion for use where space is precious or where only portable power is available. The transmitter power of the SG-2020 is adjustable from 0 to 20W output and covers the full frequency range of 1.8 to 29.7 MHz and 500kHz to 30 MHz on receive. Microprocessor controlled – loaded with "Big Rig" features making it not only usable as a fine fixed, mobile or portable Ham rig, but also for aviation and boating. The unit has the lowest current consumption on the market; <300mA in receive mode and only 3A at 20W CW on transmit. Optional **PortaPak** battery pack includes a container for ten "D" batteries, a front panel cover with facility to store the standard microphone and an adjustable strap – making the SG-2020 the ultimate "take-along" rig. **SGC 05-01**



- Power Output:** 0-20 W • **Modes:** USB, LSB & CW • **Transmitter Frequency Range:** 1.8- 29.7MHz
Receiver Frequency Range: 500kHz-30 MHz • **Resolution:** (Frequency) 2 Hz steps (Display) 100Hz steps • **Memories:** 40 simplex or duplex • Built-in SWR metering & fully adjustable 5 to 60 wpm IAMBIC keyer • Noise Blanker • RIT & XIT • VOGAD baseband Speech Processing & RF clipping Backlit LCD display **Power Requirement:** 13V DC @ Voice <3A for 20W CW – Receive typical 300mA
 • Size: 2 1/4" h x 6" w x 7 1/4" d • Weight: 4 1/2 lbs • Options: for PortaPak & Others - see Price List

PowerTalk

Stunning HF-SSB Receive
Clarity with SGC DSP

PowerTalk™ HF-SSB w/DSP



With SGC's new PowerTalk™ Control Head for the SG-2000, you'll intercept weak HF signals, increase signal clarity and eliminate unwanted noise. You'll hear SSB signals clearer and easier than ever before.

PowerTalk™ combines the advanced receiver technology of SGC's exclusive ADSP™ (Automatic Digital Signal Processing) and SNS™ (Signal Noise Subtraction). Fast audio and visual tuning – a DSP command center with a high performance spinner knob and bright LED indicators.

*Provides all of the outstanding features of the popular SG-2000: 644 Ham and ITU discrete frequencies, programmable memory, large LCD display and 150 watts of power output. **SGC 04-10***

**PowerTalk™ is a true
HF-SSB Power tool!**

HEAR in the CLEAR

PowerClear™ – Add-on DSP



SGC's new PowerClear™ uses the power of advanced **Digital Signal Processing** to clear noisy, interference-plagued audio.

Mates with any HF SSB unit. Reduces noise and interference from virtually any audio source—HF, VHF/UHF transceivers, scanners, shortwave receivers, micro-wave, and telephone lines.

PowerClear attacks noise and heterodynes with advanced DSP algorithms and lets you tailor bandpass response to your individual need—separate adjustments for low and high cutoff as well as audio bandpass shift.

Cut through the noise with factory preset filters and with up to seven combinations of your choice. The bright red and green LEDs quickly show your selected filter adjustments. Only 3.65" high! **SGC 70-07**

**Hear more with...
SGC's PowerClear!**

BUY SMART

SG-230 Smartuner®

Antenna Coupler
SSB, AM, CW & DATA



You can't buy a smarter tuner than this. An automatic antenna couple so intelligent it precisely tunes any length antenna – 8 to 80 ft. – in the HF band.

The Smartuner® automatically evaluates and switches 64 input and 32 output capacitance combinations, plus 256 inductance combinations in a "pi" network. The amazing result is over a half-million different ways to ensure a perfect match for your transceiver. And the most intelligent feature of all is that the Smartuner® remembers the chosen frequency and tuning values in less than 10 ms, each time you transmit on that frequency. **SGC 54-12**

1.8–30 MHz RANGE • 3–200 WATTS INPUT
TUNES TO 80 FT. ANTENNAS (all types) • MICRO-
PROCESSOR CONTROLLED • 10MS RETUNING TIME
NON-VOLATILE MEMORY • WATERPROOF
2D X 10W X 12D INCHES

**The SG-230 Smartuner®...
Buy Smart!**

Couple to 500 Watts

SG-235



Microprocessor Controlled Antenna Tuner

SmartTuning—Now at 500 watts. Now you can achieve perfect coupling of your 500-watt HF-SSB to your antenna. **Go mobile at 500 watts!**

The SG-235 Smartuner "intelligently" tunes any length antenna from 23 feet! No preliminary tuning or adjustment is required and the SG-235 will operate with any HF transceiver in the 1.8 to 30 MHz range and with output power from 3 to 500 watts.

Automatically, the SG-235 Smartuner evaluates and switches 64 input & 32 output capacitance combinations plus 256 inductance combinations in a "pi" network—over a half-million matches. The SG-235 Smartuner then remembers the chosen frequency and tuning values and automatically selects those values—in less than 10 ms, each time you select that frequency. Flexibility is a key feature with its attractive options, including 24V DC. **SGC 54-15**

- MICROPROCESSOR CONTROLLED TUNING
- 1.8 to 30 MHz RANGE
- 3–500W (PEP) INPUT
- TUNES FROM 23 FT. ANTENNA – FULL POWER
- NON-VOLATILE MEMORY
- WATERPROOF FOR ALL WEATHER CONDITIONS
- BUILT-IN TEST EQUIPMENT INDICATOR
- 10-MS RETUNING TIME
- 16D X 12W X 3H INCHES

HF-VHF SMARTUNER™

1.0 to 60 MHz • 100W • Automatic!

SG-231 HF-VHF Smartuner™

A smart, slim version of the intelligent Smartuner antenna coupler

- ◆ Complete frequency agility with no operator intervention
- ◆ Continuous coverage of 1 to 60 MHz with almost any antenna
- ◆ Compact design, fits the most restrictive installations
- ◆ Weatherproof case allows mounting at antenna feed point for highest efficiency

SGC 54-17



The SG-231 uses a microprocessor controlled pi of L network to match virtually any load to your transceiver; with the SWR always 1:1.5 or better. Tuning solutions are stored in a non-volatile memory for fast (10ms) automatic recall! Operates with any HF or VHF transceiver, 3 to 100 watts, and requires only 12VDC and RF connections.

The SG-231— *designed for any radio application* — a smart addition to SGC's Smartuner series, and a smart choice for your next antenna coupler.

DSP HF Modem with SmartEmailer™

Link to the world with this reliable and efficient DSP HF modem. Transmit and receive e-mail via common mode carrier or receive weather bulletins and forecasts anywhere around the globe. All you need is a HF radio with SITOR compatibility and your laptop computer running a general purpose communications program. The SG-7200 is designed for digital communications or as a free-standing general-purpose processor for embedded applications. It features Open Hardware & Software Architecture running DOS and Microsoft Windows applications. Works with public domain protocols or develop your own custom modem sets for advanced protocol development. It's a fully programmable and field upgradable, and has an easy to use graphical user interface.

SGC 56-40



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No Compromise Communications



FOUR-WHEEL-DRIVE BASE STATION...

... add a
QMS™ Antenna Tuner System
to your **HF-SSB mobile**

For any HF-SSB rig from 1.8 to 30 MHz, up to 300W. Incorporates an SGC Smartuner® along with an efficient whip antenna and the QMS™ Quick Mounting System case which enables installation of the coupler and antenna on any small or large vehicle without drilling any holes. Installation can be on the side or on the trunk, or roof – whatever location is convenient. It can be temporary or long-term and takes only 15 minutes. Supplied with straps, buckles & 4 suction cup feet to prevent damage to the vehicle surfaces. Strap hooks can be secured up to 5½ ft. apart.

The SG-303 antenna is a light-weight mobile antenna for operation from 1.8–30MHz, providing wide a frequency range and ease of tuning with the Smartuner®. Total length is 9 ft. in two sections with no traps to degrade performance. The inner core is a large gauge stainless steel rod with a layer of fiber composite helically wrapped with 3mm copper strap which is equal to #4 wire.

The antenna installs on a sturdy weatherproof rubber encapsulated spring mount. The adjustable base and ratchet mechanism allows for easy orientation.

The QMS™ Quick Mount System comes in 5 different packages, as follows:

QMS The basic Quick Universal Mount System case. Includes strapping elements and 4 suction cups to mount the SGC coupler and antenna on any vehicle. Antenna & Coupler are not supplied.

QMS-1 – The QMS (above) plus the SG-230 Automatic Coupler.

QMS-2 – The QMS plus the SG-230 Automatic Coupler & SG-303 9 ft. whip with mounting hardware.

QMS-3 – **500W SYSTEM** The QMS™ plus the SG-235 Automatic Coupler and SG-303 1.8–30 MHz HF antenna System with mounting hardware.

QMS-7 – The QMS plus the SG-231 Automatic Coupler and the SG-303 7 ft. dual resonant whip antenna with mounting hardware. Provides continuous 1–60 MHz operation.

See SGC in the Price List for all Options & Prices

BRAIN POWER

SG-500



**Smart
PowerCube**



**Microprocessor Controlled Linear
Amplifier for 1.8 to 24 MHz**

The SG-500 SmartPowerCube produces tremendous power—nearly as much as a 1000W amplifier. Yet it requires less than one cubic foot of space. Electronic brain power makes this possible. The SG-500 is an intelligent—microprocessor-controlled—high power linear amplifier, designed with high efficiency transistors. Its electronic brain constantly monitors your HF-SSB's activities, power needs, and antenna condition, and automatically—in less than 15 milliseconds—selects the right broadband filter.

It's designed to perform reliably and essentially unattended, in the most demanding conditions.

For maximum power – intelligent power – at low cost, the Smart Power Cube is just the amplifier that you need. **SGC 52-96**

- DOMESTIC: 1.8 to 24 MHz
- POWER OUTPUT: SSB: 500W PEP
- CW: 500W FOR 10MIN., NO FAN
- 500W UNLIMITED WITH FAN
- AM: 250W CARRIER MAXIMUM
- BAND SWITCHING: AUTOMATIC
- PROTECTION: INPUT OVERDRIVE, OVER CURRENT, OVER TEMP.
- SIZE: 6H x 12½ D x 11½ W IN.

Get A Grip On Standard's Hand-Helds!



C510A

C510A 2 Meter & 440MHz The Deluxe Dual-Band HT

- 1w-2m and 1w-70cm
- 200 memories + VFO and Call
- CTCSS 39 tones -Encode/Decode
- Freq steps 5, 10, 12.5, 15, 20, 25, 30 and 50
- Scanning-busy, pause or hold
- 1750 burst



CPB510DA

C510A/CPB510DA as a mobile

- 50W out VHF, 35W out UHF; 5W low power
- External speaker jack with 2+ Watts of audio power
- Quick release connect 6-1/2' umbilical cable carries RF, DC and audio
- Provides Ham-band Pass-band filters to minimize intermod
- Powers the C510A, extending battery life



C508A

C508A 2 Meter & 440MHz Dual Band

VHF & UHF IN YOUR SHIRT POCKET

- 280 mW with 2-AA batteries
- 60 memories
- 100-180, 340-400 & 400-480MHz extended receive (including AM aircraft band)
- CTCSS Encode/Decode
- 22 menu selections
- Scanning-busy, pause or hold
- Freq steps 5, 10, 12.5, 15, 20, 25, 30 and 50



C108A

C108A 2M & Very Small HT

- 20 memories
- 100-174 0MHz extended receive (including AM aircraft band)
- CTCSS Encode 23 tones
- 1 MHz, Full Range, Memory, and Memory-Scan-Memory: Programmable for Pause & Busy
- DC Power: 2 alkaline AA penlight cells



C628A

C628A 70 cm & 23 cm The Deluxe Twin-Band HT

- 5W 70 cm, 1W 23 cm at 12 VDC
- 40 memories 20 + 20 "limited"
- CTCSS Encode/Decode
- DTMF squelch with Paging
- Scanning-busy, pause or hold
- RIT on 23 cm



C188A

C188A 2 Meters The Slim-Line HT

- Fits in your shirt pocket!
- 5W at 12 VDC
- 40+ memories (or optional 200+memories with snap-in chip)
- 115-174MHz extended receive (including AM air band)
- CTCSS Encode/Decode
- DTMF squelch with Paging
- Scanning-busy, pause or hold



C568A

C568A World's Smallest Tri-Band Handheld

- 2 meter, 70 cm and 23 cm handheld
- 5W 2M, 5W cm and 350mW 23 cm using . 12V battery
- Built in CTCSS Encode/Decode
- AM Aircraft receiver (VHF)
- Battery save, adjustable
- Cross-Band Repeat
- Unsurpassed Intermod Rejection
- Scan - busy, pause and hold
- 40 + VFO and CALL, 200 ch with CMU161

**STANDARD'S
ON THE WEB!**

[HTTP://WWW.STDRADIO.COM](http://www.STDRADIO.COM)

C178A 2 Meters (+low power 440) The Deluxe Dual-Band HT

- Single-Band Price
- 5W (2M) at 12VDC & 50mW (440)
- 40+ memories (opt 200+ with plug-in chip)
- 110-174 & 320-474MHz extended Rx (including AM air band)
- CTCSS Encode/Decode
- DTMF squelch with Paging
- Scanning-busy, pause or hold



C178A

C156A 2m Transceiver

STANDARD'S QUALITY! STANDARD'S FEATURES! EVERYBODY'S PRICE!

- 5 watts high power
- 100 memories
- 135 to 174MHz extended receive
- Clear Dot-Matrix display with alpha-numeric ID
- CTCSS Encode built-in
- 9 DTMF memories
- Scanning-busy, pause or hold
- Auto repeat offset
- Built-in 1750 Tone Burst
- Auto-Power-Off 30, 60, 90 or 120 min



C156A



C558A

C558A 2 Meter & 440MHz Elegance, Balance and Twin-Band Performance

- 5W at 12VDC
- 40+ memories (opt. 200+ memories with plug-in chip)
- 115-174 & 340-474MHz extended receive (including AM aircraft band)
- CTCSS Encode/Decode
- DTMF squelch with Paging
- Scanning-busy, pause or hold



STANDARD®

For more information on this and other STANDARD products, please contact your nearest STANDARD dealer. Specifications, price and features are subject to change without obligation or notice. Standard Amateur Radio Products, Inc. P.O. Box 48480, Niles, Illinois 60714. Tel (773) 763-0081 Fax (773) 763-3377

DSP-599zx All-Mode DSP Noise Filter & RTTY Modem



The most powerful Noise and QRM filter in Amateur Radio
– used with more DSP Transceivers than any other DSP filter.

DSP-599zx - Reduces noise, eliminates heterodynes, and slices QRM. The latest generation DSP filter features a hyper-speed CPU running at 36.8 million instructions per second. A backlit, 2 x 16 alpha display, Calibrated Filters™ and Visible Memories™ make precise filter setting easy, with instant recall of all filters.

In Voice Mode, the continuously tunable filters open up from less than 1.5 kHz for SSB to 5 kHz for shortwave AM broadcast and VHF/UHF FM. The heterodyne eliminator has a user-selectable automatic notch, a manual dual notch and a manual single notch. The independently tunable low pass and high pass filters cover from 200 to 1000 Hz and from 1000 to 5000 Hz, respectively.

The DSP-599zx Data mode cuts data errors with pre-set filters for RTTY, SITOR, AMTOR, PACTOR, G-TOR, HF Packet, Weather Fax, Slow Scan TV, and Clover

- Visible Memory™
- Calibrated Filters™
- Super for weak signal CW
- 5 kHz wide filter for Shortwave & VHF/UHF FM
- RTTY modem
- Noise reduction cuts listening fatigue
- Variable noise aggressiveness
- Variable notch aggressiveness
- Variable line noise Filter (AM mode only)

plus 3 user definable filters. Adding Timewave's DSP-RTTY program and a computer to the DSP-599zx makes a powerful RTTY modem complete with a tuning bar.

In CW mode, the DSP-599zx combines variable center frequency and bandwidth filters with manual notches to pull out the weak signals in the midst of heavy QRM. Timewave's exclusive CW Pitch Shift changes the CW pitch of any radio - even classic Collins receivers.

The Test Instrument mode features a Two-Tone Generator for SSB, 20 Hz to 10 kHz Audio Sine Generator, Audio Millivolt Meter and a CTCSS Encoder & Decoder with squelch.

Meets both the FCC class B and strict European Market Standards. Requires 12V DC @ 1A 7½" w x 8" d x 1¾" h, 2.2lbs **\$399⁹⁵**

- AGC
- CW marker tone for zero beat
- Backlit LCD display
- Field upgradeable firmware
- Audio voltmeter, generator, CTCSS
- Two selectable radio inputs
- Programmable input sensitivity & line output
- Front panel programming
- Selectable memory mode on power up

QST says "A superb station accessory." See the Timewave web site for more reviews. www.timewave.com

NEW!

DSP-RTTY for DSP-599zx/59Y

Operate RTTY with your DSP-599zx or DSP-59Y, transceiver, and computer - no other data controller required! This WIN95 program has all the RTTY features you want: CQ, brag, exchange and startup tapes, 45 - 110 baud Baudot/ASCII, macros/function keys, xmit status, and big buffers. DSP-RTTY even has a terminal window for checking the DX packet cluster with your TNC. A TNC startup file lets you program your TNC to optimum parameters for your local packet cluster. Requires Windows 95 and 8 Mb RAM minimum **\$69⁹⁵**



DSP-59+ Noise Filter

The DSP-59+ digital signal processor reduces random noise, eliminates heterodynes, and filters QRM. It features 225 combinations of high and lowpass filters for Voice and special modes. Over 300 CW & Data filters cover almost any HF mode, including RTTY, SSTV, AMTOR, G-TOR®, PACTOR, Packet, Satellite, EME, SSB, CW, Weather Fax and AM.

The RTTY Remodulator digs into the noise for the really weak signals. CW center frequencies range from 400 to 1000 Hz with bandwidths from 25 to 600 Hz. Voice filters tune from 200 Hz to 3.4 kHz, to slice QRM. A 50 dB automatic notch kills heterodynes. Dramatic random noise reduction lowers noise from

static, lightning, white noise, line noise, and other random noise. Audio bypasses with pushbutton or when power is off.

Meets FCC class B and European market standards. 12V DC @ 1A 7½" w x 8" d x 1¾" h, 2.2lbs **\$269⁹⁵**

DSP-9+ Noise Filter

The DSP-9+ digital signal processor reduces random noise, eliminates heterodynes, and filters QRM. Pushbuttons select all the filters for quick, simple operation. Random noise reduction and heterodyne elimination is automatic - just press the button! The sharp filters effectively slice away QRM from voice, data and CW. The voice filters offer bandwidths from 1.6 to 2.7 kHz. CW filter bandwidths range from 100 Hz to 500 Hz. Data filters match RTTY, AMTOR, PACTOR, and HF Packet. Great for mobile operation from 160 to 6 meters **\$209⁹⁵**

AC-4 Power Supply for TW DSP filters **\$19⁹⁵**

DSP-59Y All-Mode DSP Noise Filter for YAESU



Reviewed in QST Sept 1997

DSP-59Y Plug In Module - Fits into the phone patch slot of a YAESU® SP-5 or SP-6 external speaker. It's a perfect match in style and color. It uses the existing A/B switch, audio input jacks, headphone jack and installs with just a screwdriver.

The DSP-59Y module gives the YAESU FT-1000, FT-1000D, FT-990, FT-890, & FRG-100 the latest noise reduction and DSP filtering technology. The DSP-59Y and SP-6 combination also works well with any other brand of radio or transceiver.

The DSP-59Y has almost all of the features of the DSP-599zx described to the left. It's field upgradeable with a LCD display for Visible Memories™ and Calibrated Filters™. The CW Filters range from 10 Hz to 600Hz with CW Pitch Shift. The voice filters range up to 5 kHz wide for SSB, FM and AM. It also has automatic & manual notch filters for voice and CW. Noise reduction has variable aggressiveness. Just add Timewave's DSP-RTTY program and a computer to operate RTTY. There are also preset filters for every data mode.

The DSP-59Y features a hyper-speed DSP operating at 36.8 MIPS w/80 KB of RAM on the CPU. It meets FCC Class-B & European Common Market Standards. 12VDC @ 1A. 12"d x 3¾" h x 2¾" w, 2 lbs **\$389⁹⁵**

- Easy installation inside SP-5/6 speakers
- Increases equipment value & performance
- Super for weak signal CW
- Wideband to 5 kHz for AM, FM, Shortwave
- Automatic + manual notches for heterodynes
- Noise reduction cuts listening fatigue on nets
- Preset Voice, Data and CW filters
- RTTY modem
- Optical encoder for easy tuning
- LCD Alphanumeric Display
- Visible Memories(tm) - Instant Recall
- Software controlled front panel
- AGC + Programmable line output level
- Field upgradeable firmware

Timewave is the leader in Amateur Radio DSP Technology!

Timewave advanced DSP Filters allow an economical upgrade of your existing radios to new higher performance standards.

Timewave was the first to simultaneously reduce random noise, eliminate heterodynes and provide razor sharp audio filters. Timewave precision DSP filters are a must for today's poor signal conditions and crowded bands.

Timewave's technology leading filters are preferred by DX'ers, Contesters and SWL'ers world wide.

Information, inquiries & customer service:

E-Mail: sales@timewave.com
<http://www.timewave.com>

DSP-2232zx

DSP Multi-mode Data Controller



DSP-2232zx - Now the legacy of the DSP-2232 is in a rugged package to match the renowned DSP-599zx! The DSP-2232zx has all the features that made the DSP-2232 famous: dual ports with RTTY, AMTOR, PacTOR, 9600/1200 bps Packet, satellites, SITOR, NAVTEX, SIAM™ and more. It even works with the same software. PC PakRatt for Windows included.

The DSP-2232zx is the premier satellite data controller. It features automatic doppler correction for PSK modems and outputs for up/down frequency stepping to control the radio's frequency.

The overall package features extruded aluminum

housing, wear-resistant graphic overlays, LED tuning bars and status indicators, and a super-sharp, backlit LCD alphanumeric display.

Timewave Engineers worked their DSP magic with 16 bit A/D-D/A conversion and a faster DSP for greater dynamic range and lower noise. Then they added high level integration to reduce chip count and size. The result? - more performance, fewer parts. Just what you expect from Timewave - just what you want in your shack!

13.8VDC, 7 1/2" w x 8" d x 1 3/4" h, 2.2lbs.... **(TBA) CALL**

AC-4 Power Supply for DSP-2232zx..... **\$19⁹⁵**

- Dual Simultaneous Ports
- True Gateway between modes & radio ports
- 9600 & 1200 bps packet
- Signal Identification (SIAM™)
- Auto satellite Doppler correction
- Great modes, plus the satellites

- Full MailDrop Facilities
- Hardware HDLC
- DSP modulation and demodulation
- All standard modes
- PSK modems
- Hardware memory ARQ



PK-96

Lowest Cost 9600/1200 bps TNC

A plug-in and go TNC, loaded with features. 9600/1200 bps packet ready; GPS firmware standard; Remotely programmable GPS commands; stand-alone tracking; Hardware HDLC for accuracy; True DCD to hear weak signals; Gateway as a node; Full MailDrop facility; AEA Host mode, Advanced command set, DAMA, Identify TCP/IP, TheNet & NetRom, separate external TX adjustments for 9600/1200 bps; External reset; PC PakRatt Lite™ software included; PakRatt for Windows program available. Requires 12VDC. 6.25" w x 7.5" d x 1.4" h, 1.25 lbs. 32k RAM (18k mailbox) standard; 128k RAM (100k mailbox) available..... **\$169⁹⁵**



PK-12

Low cost, 1200 bps, VHF/UHF, packet TNC

Ideal unit for getting started in Digital Communications, 1200 bps, VHF packet ready; Gateway as a node; PC PakRatt Lite™ control software included; APRS adapter cable available; Identify TCP/IP, TheNet & NetRom, GPS firmware and commands; Stand-alone tracking; External TX adjustment. Perfect for keyboarding & DX Cluster. Full of features for mobile. Energy efficient 12VDC, or operate on 9V battery. 5 1/2" w x 5 1/2" d x 1 1/2" h, 12oz.... **\$99⁹⁵**

AC-1 Power Supply for PK-96, PK-12..... **\$15⁹⁵**

Log Windows

Logging, Awards, DX Packet Cluster, Rig and Antenna Rotor Control

A proven program for your station with rig and rotor control, CD-ROM and on-line callbook interface, QSL manager lists and voice/cw DX spots and filters. Search, import, print logs. Supports all popular awards. Interim updates available on WWW. Supports all TNCs. For WIN95, 3.1..... **\$49⁹⁵**

PC PakRatt for Windows

The official terminal program for all Timewave and AEA TNCs and data controllers. PacTOR, AMTOR, RTTY, Morse, NAVTEX, SIAM (signal identification). Controls multiple TNCs w/ dual ports. QSO logging. WIN95, 3.1..... **\$79⁹⁵**

AEA FAXIII

WeFAX, NAVTEX, RTTY, CW

Receive HF weather fax images with a receiver, your computer, and FAX III. Features color, tuning indicator, image storage, printing. Includes demodulator. Requires serial port and DOS..... **\$99⁹⁵**

Morse University II

Get your license or upgrade now!

Learn Morse code and theory to pass all your FCC exams. Teaches you the code from Novice to Extra! Proven by thousands! WIN95, 3.1..... **\$39⁹⁵**



DM-1

Deviation Meter

Measure FM transmitter deviation on 144, 220, or 440 MHz. Battery powered, crystal controlled, no tuning. Two ranges allow accurate measurement of voice, data, DTMF and sub-audible deviation. Includes outputs for an external digital or analog meter, and audio monitor. 6 1/2" w x 4 1/2" d x 1" h, 1 lb..... **\$169⁹⁵**



DRAKE

TR-270

2 meter FM Base/Mobile Transceiver

Major features: Dual receiver operation with two VFOs per receiver and independent volume and squelch controls; High dynamic range front end; Frequency tuning via tuning wheel, up/down buttons, or direct keypad entry; Multiple scan functions; Pre-programmed operating parameters with customizable settings; RS232C interface; three selectable power output levels; Switchable IF filters.

Total integration of FM voice, packet, satellite, and weather fax - ACARS data reception possible with the optional TNC270 and DEMOD270 (200 additional memories in weather satellite and satellite modes).

DTMF encoding and dialer; CTCSS encode/decode; Desktop design, front mounted speaker; Built-in switching power supply; Dynamic microphone; External DC input for mobile or emergency operation. LED and backlit LCD display with indicators of all operating and setup parameters..... **\$999⁹⁵**

Transmit range	142 to 150 MHz
Extended receiver range.....	136 to 174 MHz & 420 to 470 MHz
Maximum power output	25W
Sensitivity	0.18µV/12dB SINAD
Audio output at 8Ω.....	2W
Power Requirements.....	15/230 VAC ±10% 13.8V DC @ 8A
Dimensions	4 1/4" h x 11" w x 1 3/4" d

TNC-270 Terminal node controller A plug-in controller card for the TR-270 transceiver. 1200/9600 bps. Easy operation, comes with PC PakRatt™ software for Windows® and PP Lite™ software for DOS..... **\$249⁹⁵**

DEMOM-270 TNC-270 accessory Provides demodulation of weather satellite transmissions, including NOAA APT, GOES and HF WEFAX (additional equipment may be required), and other facsimile signals; ACARS, Morse code and RTTY also possible..... **\$99⁹⁵**

AES Specialty Items - CLOSEOUT

SC189 Portable Rechargeable Camping Light - \$29⁹⁵

- Two 4W fluorescent lamps
- Built-in flashlight
- Built-in heavy duty rechargeable battery
- Low battery indicator

SC192 Portable Multi-function Work Light - \$9⁹⁵

- 12V DC, On/Off switch
- Powerful magnetic mount
- Built-in tripod stand with adjustable tilt

SC193 12 Volt DC High-Powered Car Vac - \$9⁹⁵

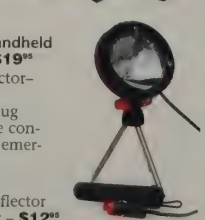
- Removable, washable filter
- Includes crevice tool for accessing tight areas
- 10 ft. car cord
- High powered motor

SC784B 12V Portable Handheld Spotlight with Tripod - \$19⁹⁵

- Quartz halogen; 8" reflector-1,000,000 candle power
- 8 ft. cord with lighter plug
- High-impact ABS handle conceals foldable tripod for emergency use

SC784

- Same as above, but 5" reflector & 400,000 candle power - **\$12⁹⁵**



Leading the way in HF technology.

FT-1000MP

Revolutionary All-Mode HF Transceiver with EDSP™

- Enhanced Digital Signal Processing (EDSP™)
- Noise Reducer, RX/TX waveform Contour shaping control, Digital Notch plus IF Notch, Digital CW Narrow Filters, Microphone Equalization • Shuttle Jog™ Tuning Enhancement • Directional Tuning Scale for CW/Digital Modes and Clarifier Offset Display • Selectable Antenna Jacks • Programmable Tuning Steps • 100W PO • Dual In-band Receive with Separate S-meters • Built-in Collins® SSB Mechanical Filter • CW Electronic Keyer with two Key Jacks • CW Spot • Automatic Antenna Tuner • 100-117, 200-234V AC and 13.5V DC power inputs • DC version available • 99 Memories.

FT-1000/D

Elite-Class All-Mode HF Transceiver

- 200W PO • Dual Receive • 108 dB dynamic range
- Cascaded IF Filters • Direct Digital Synthesis (DDS) • IF Width/Shift/Notch • CW Spot • CW Audio Peaking Filter • CW Electronic Keyer with two Key Jacks • IF Noise Blanker • Automatic Antenna Tuner • RF Speech Processor • Front panel RX Antenna selector switch • Two large fly-wheel-weighted tuning knobs • 99 Memories.

FT-920

All-Mode HF/6m Transceiver

- High-Performance 33MIPS* DSP
- HF + 50 MHz w/100 Watts-all Bands
- MOSFET PA Finals • High Speed Auto Antenna Tuner (works on RX & TX) • Omni-Glow™ Dual Display
- Twin VFO Knobs • FET RF Amplifier for High & Low Bands • Digital Voice Memory System • Quick Memory Bank (QMB) Frequency System • 127 Memories. *Million Instructions Per Second

FT-847

HF/50/144/430 MHz All Mode Transceiver DSP Filters—notch, NR and BPF • Built-in 6-Meter

- Voice Monitor • Separate Sub-Band Dial • Shuttle Jog Dial • Smart Search • Digital Meter • 19 Memories
- 100W for HF/6-Meter; 50W 2-Meter/430 MHz • Crossband Full Duplex • Normal/Reverse Tracking
- CTCSS and DCS Encode/Decode • Direct Keypad Frequency Entry
- 1200/9600bps Packet-Ready

FT-840

High Performance Compact HF Transceiver

- High Receiver Dynamic Range
- Dual Band Stacking VFOs with Direct Digital Synthesis (DDS) • 100W PO
- IF Shift • IF Noise Blanker • Digital Mode Interface • CW-Reverse feature
- Adjustable Repeater CTCSS Tones
- Optional (External) Automatic Antenna Tuner • 100 Memories.

FT-600

Multi-Purpose HF SSB Transceiver

Frequency Range: RX: 50 kHz - 30 MHz; TX: 160-10M • 100W PO • MIL-STD 810 Rating • Alphanumeric Omni-Glow™ LCD Display • Keypad Frequency Entry • Optional CW (500 Hz) and AM (6 kHz) filters available • Dual Watch • Front-mounted Speaker with High Audio Output • PC Programmable • 100 Memories (in 4 banks of 25).

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YAESU

Choice of the World's top DX'ers

For the latest Yaesu news, hottest products, visit us on the Internet! <http://www.yaesu.com>

EARTH STATION FT-847

HF/50/144/430 MHz All Mode Transceiver

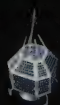
"Compact, too—great for our next 'rover' operation."

"HF/VHF/UHF, and satellite, all-in-one!"



"Looks like Yaesu did it again!"

"And the DSP helped me hear my first moonbounce signal, ever!"



The FT-847 changes base station operation forever. Now, three radios in one—HF, VHF/UHF, satellite; technology in its finest application, from the world leader in amateur communication.

With its unequalled combination of features, like DSP filters—notch, NR and BPF, built-in 6-meter, voice monitor, separate sub-band dial, Shuttle Jog dial, Smart Search, and digital meter, the FT-847 is the only radio of its kind! Exclusively for satellite work, 19 memories exceed any other radio. For performance, power-up with 100W for HF/6-meter, and 50W for 2-meter and 430 MHz. Additional "must-haves" include cross-band full duplex, normal/reverse tracking, CTCSS and DCS encode/decode, and direct keypad frequency entry. Plus, the FT-847 is 1200/9600 bps packet-ready.

Take the next step in all-band performance and take home the FT-847 today!

**Only one transceiver gives you
all mode operations on HF/50/144/430 MHz
with full Satellite capability.**



NEW
Yaesu Patented
Design

ATAS-100 Active Tuning Antenna System

Designed for the FT-847. Works on 7/14/21/28/50/144/430 MHz
Amateur Bands for mobile operation.

YAESU
Choice of the World's top DX'ers

For the latest Yaesu news; hottest products,
visit us on the Internet! <http://www.yaesu.com>

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"The quick-release remote front panel gives you so many installation options."

"And with dual receive you can talk on one band, and listen on another!"



"Plus, the high-tech Enhanced Smart Search™ is great for finding repeaters --and you can watch it all on the dual display."

"Looks like Yaesu did it again!"

FT-8100R

Compact Dual Band Mobile

Now a dual-bander that remotes and is easy-to-use, without sacrificing the features you want!

With its quick-release, remote front panel system, the FT-8100R combines high-performance dual-band features in a simple-to-operate rugged mobile built to the endurance standards of commercial radios. The result is installation flexibility and industry-first, "must-have" advantages!

Use dual receive (V+V, U+U or V+U), or talk on one band while listening on another. Watch Yaesu's exclusive Enhanced Smart Search™ automatically seek out and load active frequencies--great for finding new repeaters while traveling.

Get wide receive coverage--from 110 to 550 MHz and 750 to 1300 MHz* for public safety, marine, aircraft, and weather channels. Enjoy up to 50 Watts of VHF power output (35 Watts on UHF) with High/Medium/Low choice on each band, and "plug and play" 1200 or 9600 bps packet. Utilize 208 memory channels--the greatest available on any remote mobile--to store repeater offset, CTCSS tone, packet baud rate, and power level.

Yaesu's popular Omni-Glow™ display provides a wide field of view, and includes a DC voltage meter. Quickly program, or clone frequency memories with optional Windows™ PC programmable ADMS-2D.

"User-friendly" describes the streamlined front panel layout. Eight clearly-marked keys, and separate Volume/Squelch controls for each band, make operation easy. And the backlit DTMF microphone includes 3 user-programmable keys...but no awkward keypad cover!

Don't sacrifice high-performance features in your dual-band mobile installation. Get the easy-to-use FT-8100R at your Yaesu dealer now!

YAESU

...leading the way.™

For the latest Yaesu news, hottest products: visit us on the internet! <http://www.yaesu.com>

Features

- Frequency Coverage
 - RX: 110~550 MHz
 - 750~1300 MHz*
 - TX: 144~148 MHz
 - 430~450 MHz
- Detachable Front Panel (removable w/optional YSK-8100)
- 3 Power Output Levels
 - 2m 50/20/5 Watt
 - 70cm 35/20/5 Watt
- 208 Memory Channels
- Enhanced Smart Search™
- CTCSS Encode
- Built-in Duplexer
- S-Meter Squelch
- Dual Receive (V+V, U+U, V+U)
- Crossband Repeat (bidirectional or one-way)
- PC Programmable w/optional ADMS-2D
- Digital Battery Voltage Display
- Auto Power Off (APO)
- Omni-Glow™ Display
- 1200/9600 bps Packet Compatible
- Alternating-Band Memory Selection (ABMS)
- DTMF Autodialer (6 Memories)
- Time Out Timer (TOT)
- Accessories: Consult your local Yaesu dealer.

*Cellular & 900 MHz Cordless Phone frequencies blocked.



50W/VHF
35W/UHF



"VHF, UHF, AM, FM, Air Band, Police, Fire--TV" too? Wow"

"The VX-1R is smaller than most pagers!"

"Over 19 hours* of use from the rechargeable lithium ion battery!"

"Looks like Yaesu did it again!"

VX-1R

Ultra-Compact Dual-Band Handheld

Features

- Frequency Coverage
- Wide Multi-Band Receive
- RX: 76~999 MHz**
- TX: 144~148, 430~450 MHz
- AM/FM/TV Broadcast Receive
- AM Aircraft/Public Safety Receive
- CTCSS Encode/Decode
- DCS Encode/Decode
- CTCSS/DCS Tone Search
- Dual Watch
- SmartSearch™
- Auto Range Transpond System™ (ARTS™)
- Priority Channel Alarm
- ADMS-1D Windows™ Programmable
- 1 Watt External Power Supply
- 80 Minute Rapid Charger
- Flexible Antenna, Belt Clip, Hand Strap
- **Cellular blocked
- *Battery Life: 5-5-90 duty cycle.



Actual Size
Shown

1.78"x3.31"x1.516"

The world's smallest HT with all the high-tech features Dick Tracy could ever want!

The ultra-compact size of the VX-1R Dual-Band is the first thing you notice as you cradle it in your palm. But the high-tech features make this radio one you must have now! Simple combinations, using seven buttons and one knob, control this marvel of engineering. One soft key touch, and wide receive VHF/ UHF--76~999 MHz RX (except celllar); 144~148, 430~450 MHz TX, or AM/FM Broadcast, Aircraft, Police, Fire--even TV, spring to life! Touch again for Yaesu-exclusives, SmartSearch™ and ARTS™, or Priority Channel Alarm. Built-in CTCSS and DCS Encode/Decode for 2m/440 amateur bands, CTCSS/DCS Tone Search, and Dual Watch, are included along with 291 Memory Channels in 9 banks with 500 mW power-output. Backlit LCD Display

shows 6-character alphanumeric capability; backlit keypad makes operation easy in dim light. And, although the



FT-50RD
MIL-SPEC Heavy
Duty, Dual-Band
Handheld

FT-51R
Dual-Band with
Dual Receive and
Help Menu Function

VX-1R is the world's smallest† dual-band HT, you get over 19 hours* of use with just a 1 hour recharge from its long-lasting lithium ion battery! Big features, small size--the most satisfying combination in the world! See it at your Yaesu dealer today!

YAESU

...leading the waySM

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†Smallest HT as of Jan. 1998

RF POWER AMPLIFIERS

AMERITRON



ALS-600 • Solid-state, no tune linear. Continuous coverage 1.5–22MHz; 10/12M with kit. 100W drive for 600W PEP SSB/500W CW output. Illuminated Cross-Needle SWR/Wattmeter. SWR & overload protection, ALC control. Transmit, ALC & SWR LED indicators. Separate 110/220V power supply. Both are 6" h x 9 1/2" w x 12" d, 48 lbs (total)..... **\$1129⁹⁵**



AL-800/800H

AL-811/811H

AL-800 • Covers 160-12M; modifiable for 10M Single 3CX800A7, 1200W output..... **\$1429⁹⁵**

AL-800H • Covers 160-12M; modifiable for 10M Two 3CX800A7 tubes, 1500W output..... **\$2049⁹⁵**

AL-811 • Low cost Desktop linear. Covers 160 to 12M; modifiable for 10M Uses three 811A tubes with tuned input to deliver 600W PEP SSB/500W CW output with 75W drive. Vernier drive plate tuning, illuminated grid and plate voltage/current meters, adjustable ALC. Built-in 110/220V power supply. 16" d x 13 3/4" w x 8" h, 40 lbs..... **\$599⁹⁵**

AL-811H • Similar to AL-811, but four 811A tubes for 800W PEP SSB output with 75W input **\$729⁹⁵**



AL-80B • Covers 160 thru 15 meters including WARC & MARS; bands. Modifiable for 10 & 12 meters. Uses a single 3-500Z; 85W drive produces 1KW PEP SSB and

850W CW output. Dual illuminated cross-needle meters, QSK compatible. Built-in 110/220 VAC supply. 14" w x 8" h x 15 1/2" d, 52 lbs..... **\$1149⁹⁵**

AL-82
AL-1200
AL-1500
similar in
appearance



AL-82 • Full legal! Covers 160-12M; modifiable for 10M. Two 3-500Z's; 100W drive for 1500W cont. output. Built-in supply w/Hypersil® transformer, 220V @ 15A. 10" h x 17" w x 18" d, 76 lbs..... **\$1899⁹⁵**

AL-1200 • Full legal output! Covers all ham bands 1.8–21MHz + WARC bands; owner modifiable for 10M. Single Eimac 3CX-1200A7 ceramic tube requires 100W drive for 1500W output. Heavy silver-plated tank components, built-in heavy-duty power supply with Hypersil® transformer, 220V–15A. 10" h x 17" w x 18" d, 83 lbs..... **\$1969⁹⁵**

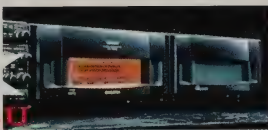
AL-1500 • Full legal! Covers 160-12M; modifiable for 10M. Single Eimac 8877 ceramic tube delivers 1500W+ output with only 65W drive. Heavy-duty built-in power supply with Hypersil® transformer, 220V @ 15A. 10" h x 17" w x 18" d, 77 lbs. **\$2399⁹⁵**

AL-572 • Provides 1300W PEP SSB & 1000W CW power output peak 160 to 15M. (4) rugged Svetlann 572B tubes, near legal limit power & 3-second warm-up. Built-in multi-voltage AC supply. Lighted Cross-Needle meters. Dynamic ALC. Tuned 50Ω input. QSK Compatible. Fan Cooled. Vernier Reduction drives on Plate & Load. 8 1/2" h x 15 1/2" d x 14 1/2" w..... **\$1249⁹⁵**



SPECIAL

New
from
YAesu



QUADRA SYSTEM HF/6-METER AMPLIFIER

- Amateur Band Coverage: 160-15 & 6 meters
- 1000W Power Out @ 220V AC
- 500W on 6-meters **\$4899⁹⁵**
- (8) MRF150 Power MOS FETs
- Multi-function Omni-Glow LCD Display
- Automatic System Monitoring with VSWR Protection
- Built-in High-Speed Antenna Tuner
- (2) RF inputs • (4) RF outputs
- Automatic Bandswitching with Yaesu's FT-1000D, FT-1000MP, FT-920 & FT-900
- (2) input voltages: 117VAC for 500W; 220V AC for 1000W
- Separate Amplifier and Power Supply Units
- Size: (each) 16 1/2" x 5 3/4" x 16 1/2"
- Weight: (Amp) 33 lbs; (Power Supply) 26 lbs

SGC

SG-500

SmartPowerCube™

A fully automatic band switching, microprocessor controlled HF Linear Amplifier. Covers 1.6–24 MHz, ideal for fixed, mobile, & marine operation. Rugged, nearly indestructible! Cast-aluminum enclosure, extra heavy duty heat sinks, powder coat finish and durable electronic components. 500W PEP output with 50 to 90W input; CW rating is 500W output for 10 minutes, or unlimited with an optional fan. 10–18.0 VDC @ 40A average (SSB), 90A peak, or CW. 6" h x 12 1/2" d x 11 1/2" w, 21 lbs..... **\$2-96 \$999⁹⁵**



concept's

VHF/UHF AMPS

- Single/Duobanders
- 12V DC
- FM/CW/SSB
- Receive preamplifier
- Overdrive protection

Model	input	output	amps	Price
2-meters				
MAXAMP-10	10W	150W+	25	\$329⁹⁵
MAXAMP-45	40W	150W +	22	299⁹⁵
40MHz				
4-110	10W	100W	22	359⁹⁵
4-310	30W	100W	20	339⁹⁵
Dual Band - 2m/440 MHz				
2/70G	3W/5W	30W/20W	6	c/o 249⁹⁵
Mini-AMPS				
144P	2W	30W	6	129⁹⁵
440P	3W	20W	6	159⁹⁵

ALS-500M • No tune-up, solid-state FET linear amplifier. Ideal for high-powered mobile operation. Continuous coverage 1.5 to 22MHz; 10/12M with optional kit. Four 2SC2879's deliver 500W PEP SSB & 400W CW with less than 100W drive. SWR & overload protection, remote ON/OFF control. Requires 13.8VDC @ 80A peak for PA & 12 to 15VDC @ 4A for control & bias. 3 1/2" h x 9" w x 15" d, 7 lbs..... **\$699⁹⁵**



MIRAGE VHF/UHF AMPLIFIERS

Add a MIRAGE amplifier to your rig for 30 to 600 watts of BRUTE POWER! Models for 6 meters through 70 cm – Base, Mobile, Repeater or ATV operation.

- 12V DC • FM/SSB/CW modes • Continuous duty
- 20dB GaAsFET preamp • Overdrive & High-temp protection • Remote control capability

Model	MHz	input	amps	preamp	SALE
A-1015G	50-54	10W 150W	23	yes	\$349⁹⁵
B-34	144-148	2W 30W		no	69⁹⁵
B-34G	144-148	2W 30W		yes	89⁹⁵
BD-35	144/440	45/25W		no	149⁹⁵
B-215G	144-148	2W 150W	20	yes	339⁹⁵
B-1016G	144-148	10W 160W	25	yes	339⁹⁵
B-1030G	144-148	10W 300W	48	yes	619⁹⁵
B-310G	144-148	4W 100W		yes	179⁹⁵
B-2516G	144-148	30W 160W	25	yes	269⁹⁵
B-2530G	144-148	30W 300W	48	yes	619⁹⁵
B-5016G	144-148	50W 160W	24	yes	269⁹⁵
B-5030G	144-148	50W 300W	48	yes	599⁹⁵
C-22G	222-225	2W 20W	5	yes	\$154⁹⁵
C-211G	222-225	2W 110W	20	yes	c/o 249⁹⁵
C-106G	222-225	10W 60W	12	yes	214⁹⁵
C-1012G	222-225	10W 120W	5	yes	299⁹⁵
C-1022G	222-225	10W 220W	20*	yes	589⁹⁵
C-2512G	222-225	30W 120W	20	yes	289⁹⁵
C-2522G	222-225	30W 200W	42	yes	589⁹⁵
C-5012G	222-225	50W 120W	20	yes	c/o 239⁹⁵
C-5022G	222-225	50W 240W	42	yes	c/o 469⁹⁵
D-15N	425-450	2W 15W	3	no	\$169⁹⁵
D-26N	430-450	2W 60W	12	no	244⁹⁵
D-1010N	430-450	10W 100W	15	no	354⁹⁵
D-3010N	430-450	30W 100W	20	no	329⁹⁵
D-1010ATVN	430ATV	10W 100W	20	no	369⁹⁵

* @ 28VDC N denotes Type-N connectors

RC-1 Remote Control Head • for all Mirage amplifiers except the B-23S, B-23G, C-22G and D-26N..... **\$45⁹⁵**

MAHA

DOCKING BOOSTERS

With the appropriate adapter, you can slide on & boost your ICOM, KENWOOD or YAESU handheld radio up to 50W. Forget about the battery pack, the booster will power the HT at 5W. Also works with ADI & RADIO SHACK HTX-202.

MH-A301 • 2m FM, 5W in/35W out, 18dB GaAsFET preamplifier..... **\$115⁹⁵**

MH-A302 • Dual Bander – 2m 5W in/45W out; 440MHz, 5W in/35W out..... **\$165⁹⁵**



HT AMPLIFIERS



MH-A101 • 2m FM, 5W in/35W out..... **\$69⁹⁵**

MH-A102 • 2m FM/SSB, 5W in/45W out, 15dB GaAsFET preamplifier..... **\$89⁹⁵**

MH-A103 • 2m FM/SSB, 5W in/50W out, 15dB GaAsFET preamplifier..... **\$119⁹⁵**

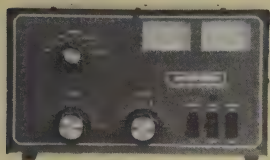
MH-A104 • 2m FM/SSB, 5W in/100W out, 15dB GaAsFET preamp, adjustable..... **\$229⁹⁵**

MH-A201 • Dual Bander – 2m 5W in/45W out; 440MHz 5W in/35W out..... **\$159⁹⁵**

New! ICOM IC-PW1 1KW HF + 6m Amplifier – see p. 55

AMERITRON... 800 Watts... \$729⁹⁵

Ameritron gives you four 811A tubes, 800 watts and far better quality -- for less money -- than a competitor's 3 tube 600 watt unit... Why settle for less power, less quality and pay more money?



AL-811H
\$729⁹⁵
AES PRICE

AL-811
\$599⁹⁵
AES PRICE

Kilowatt Amplifier



AL-80B
\$1149⁹⁵
AES PRICE

Full kilowatt PEP output from a whisper quiet compact desktop linear. Only 8 1/2 x 14 x 15 1/2 inches. Plugs into nearest 120 VAC outlet. All bands 160-15 Meters, 1000 Watts out on SSB, 850 watts out on CW, genuine Amerex 3-500ZG tube has graphite plate, nearly 70% efficiency, inrush current protection, multi-voltage transformer.

Only the Ameritron AL-811H gives you four fully neutralized 811A transmitting tubes. You get absolute stability and superb performance on higher bands that can't be matched by un-neutralized tubes.

Ameritron mounts the 811A tubes vertically -- not horizontally -- to prevent hot tube elements from sagging and shorting out. Others, using potentially damaging horizontal mounting, require special 811A tubes to retard sagging and shorting.

A quiet, powerful computer grade blower draws in



AL-572
\$1249⁹⁵
AES PRICE

new class of Near Legal Limit™ amplifier gives you 1300 Watt PEP SSB power output for 65% of price of full legal limit amps! Four rugged Svetlana Russian 572B tubes. Instant 3-second warm-up. Plugs into 120 VAC. Compact 8 1/2 x 15 1/2 x 14 1/2 W. 160-15 Meters. 1000 Watt CW output. Tuned input, instantaneous RF Bias, dynamic ALC, parasitic killer, inrush protection, two lighted Cross-Needle meters, multi-voltage transformer.

plenty of cool air. It pressurizes the cabinet and efficiently cools your 811A tubes. Our air flow is so quiet, you'll hardly know it's there -- unlike noisy, poorly chosen blowers.

You also get efficient full size heavy duty tank coils, full height computer grade capacitors, heavy duty high silicon core power transformer, slug tuned input coils, operate/standby switch, transmit LED, ALC, dual meters, QSK compatibility with QSK-5 plus much more.

AL-811 has three 811A tubes and gives 600 Watts output for only \$599.95.

AMERITRON offers the best selection of legal limit amplifiers

AMERITRON's legal limit amplifiers use a super heavy duty Hypersil® power transformer capable of 2500 watts!

Ameritron's most powerful Linear

AL-1500
\$2399⁹⁵
AES PRICE

Ameritron's super powerful amplifier uses the herculean Eimac® 8877 ceramic tube. It's so powerful that 65 watts drive gives you the full legal output -- and it's just loafing because the power supply is capable of 2500 Watts PEP.

Ameritron's 3CX1200A7 linear Amp

AL-1200
\$1969⁹⁵
AES PRICE

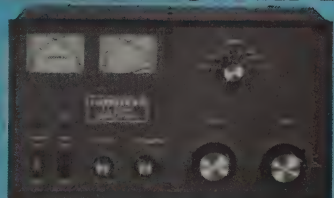
Get ham radio's toughest tube with the Ameritron AL-1200 -- the Eimac 3CX1200A7. It has a 50 watt control grid dissipation. What makes the Ameritron AL-1200 stand out from other legal limit amplifiers? The answer: A super heavy duty power supply that loafs at full legal power -- it can deliver the power of more than 2500 watts PEP two tone output for a half hour.

Ameritron's dual 3-500 linear

AL-82
\$1899⁹⁵
AES PRICE

This linear gives you full legal output using a pair of 3-500s. Most competing linears using 3-500s can't give you 1500 watts because their lightweight power supplies can't use these tubes to their full potential.

AMERITRON HF Linear Amps with Eimac™ 3CX800A7



AL-800H
\$2049⁹⁵
Two tubes
1500 Watts plus

AES PRICE

AL-800
\$1429⁹⁵
Single tube
1250 Watts

AMERITRON's new 800/H amplifiers cover 160-15 Meters including WARC bands. The AL-800 has a single Eimac™ 3CX800A7 tube and produces 1250 Watts PEP. The AL-800H has two 3CX800A7s giving 1500 Watts plus.

Both amps have an adjustable slug tuned

input circuit, grid protection, ALC control that is front panel adjustable, vernier reduction drives, heavy duty 32 pound grain oriented silicone steel core transformers and high capacitance computer grade filter capacitors.

These amplifiers have multi-voltage operation (14 user selectable AC line voltage from 90-140; 200-250 VAC), quiet pressurized ventilation systems, dual illuminated Cross-Needle meters that read peak forward and reflected power, SWR, high voltage, grid current and plate current.

Vernier reduction drives make tuning adjustments smooth and easy. Ameritron's exclusive Step-Start Inrush Protection™ stops damage to your amplifier from inrush current. Ameritron amps feature an attractive Lexan front panel decal and superior, all metal construction -- it's built to last! Ultra compact desktop size is perfect for your operating station. 8 1/2 x 16 1/2 x 14 1/2".

AMERITRON no tune Solid State Amplifiers

Ameritron ALS-500M Mobile no tune Solid State Amp has 500W out, covers 1.5-22 MHz

Ameritron ALS-600 no tune Solid State base amp includes heavy duty power supply, 600 Watts out



ALS-500M
\$699⁹⁵
Mobile amplifier
-- uses
AES PRICE

13.8 Vdc mobile electrical system, very compact 3 1/2 x 9 x 15 in., extremely quiet, 500W output, 1.5-22 MHz coverage, instant bandswitching, no tuning, no warm up, no tubes, SWR protected.



ALS-600
\$1129⁹⁵
AES PRICE

No tuning, no fuss, no worries -- just turn it on and operate. Includes AC power supply, 600 W output, continuous 1.5-22 MHz coverage, instant bandswitching, fully SWR protected, extremely quiet, very compact. Amp is 6 x 9 1/2 x 12 inches.

AMERITRON brings you the finest high power accessories!

RCS-8V Remote

Coax Switch... \$139⁹⁵

Replace 5 coax feedlines with a single coax. 1.2 SWR at 250 MHz.

Useable to 450 MHz. 1kW at 150 MHz. RCS-4, \$129⁹⁵ 4 position remote HF switch.

ADL-1500 Dummy Load

with oil... \$59⁹⁵

Oil cooled 50 ohm dummy load handles 1500 W for 5 minutes. SWR under 1.2 up to 30 MHz. Low SWR to 400 MHz.

ICP-120/240... \$79⁹⁵

Stops power-up inrush current and absorbs momentary high voltage spikes to your amplifier. ICP-120 for 110-120V, ICP-240 for 220-240 V.

ATR-15 Legal Limit

Antenna Tuner... \$369⁹⁵

Designed for legal limit amplifiers! Covers 1.8-30 MHz, peak reading SWR/Wattmeter, 6 pos. antenna switch, 1:1 or 4:1 balun.

ARB-702 K/Y/I amp-to-radio interface... \$39⁹⁵

Protects your costly transceiver from damage by keying line transients, steady state current and excessive voltages.

QSK-5 Pin Diode T/R

Switch... \$329⁹⁵

Self-contained, connects externally to most HF amps. Handles 2.5 KW PEP, 2 KW CW. Six times faster than vacuum relay. 6x4x9 1/2 in.

ATP-100 Tuning Pulser lets you safely tune your amplifier... \$49⁹⁵

Pulse tuning lets you safely tune up your amplifier for full power output and best linearity. Keeps average power to low safe level to prevent overheating, tube damage, power supply stress and premature component failure.

ADL-2500 2500 Watt fan cooled dry dummy load... \$189⁹⁵

Whisper quiet fan. Handles any legal limit amplifier -- 2500 Watts average power for 1 minute on, ten off. 300 Watts continuous. SWR below 1.25 to 30 MHz and SWR below 1.4 to 60 MHz.

... the world's high power leader!

AMERITRON®

... the world's high power leader

116 Willow Road, Starkville, MS 39759
TECH (601) 323-8211 • FAX (601) 323-6551

8 a.m. - 4:30 p.m. CST Monday - Friday
For high power amplifier components, call (601) 323-8211
Web Site... <http://www.ameritron.com>

Free Catalog: 800-713-3550

Call AES for best price and immediate delivery!

MIRAGE ... 160 Watts on 2 Meters!

Turn your mobile, base or handheld into 160 Watt powerhouses and talk further, longer, clearer... All modes: FM, SSB, CW... Superb GaAsFET preamp... More!

B-5016-G
\$269⁹⁵
AES PRICE



Power Curve -- typical B-5016-G output power

Watts Out	130	135	140	145	150	155	160	160+
Watts In	20	25	30	35	40	45	50	55

The MIRAGE B-5016-G gives you 160 watts of brute power for 50 watts input on all modes -- FM, SSB or CW!

Ideal for 20 to 60 watt 2 Meter mobile or base. Power Curve chart shows typical output power.

Hear weak signals -- low noise GaAsFET preamp gives you excellent 0.6 dB noise figure. Select 15 or 20 dB gain.

B-5016-G has legendary ruggedness. We know of one that has been in constant use since 1979!

Heavy-duty heatsink spans entire length of cabinet -- prevents overheating. Power transistors protected by MIRAGE's Therm-O-Guard™.

Fully protected from high SWR and excessive input power. Has warning LED.

Has smooth adjustable Transmit/Receive

switching with remote external keying.

RC-1, \$45.95. Remote Control. On/Off, pre-amp On/Off, selects SSB/FM. 18-ft cable.

Draws 17-22 amps at 13.8 VDC. 12x3x5 1/2 in.

More 160 Watt, 2 Meter Amplifiers...

B-2516-G, \$269.95. For 10 to 35 watt mobile or base stations. 160 watts out for 25 watts in.

B-1016-G, \$339.95. MIRAGE's

most popular dual purpose

HT or mobile/base amplifier.

160 watts out/10 W in.

For 0.2-15 watt transceivers.

B-215-G, \$339.95. MIRAGE's most popular handheld amp. 150 watts out/2 watts in; 160 watts out/3 1/2 W in. For 0.25 to 5 watt HTs.

B-1016-G
Great for ICOM
IC-706!

144/440 MHz Amp 45/35 Watt Dual Band

BD-35
\$149⁹⁵
AES PRICE



MIRAGE
RUGGED!

35 Watts for 2 Meter HTs

B-34-G
\$89⁹⁵
AES PRICE



• 35 Watts Out-2 M • All modes: FM, SSB, CW
• 18 dB GaAsFET preamp

• Reverse polarity protect • Works w/HTs to 8W

• B-34... 35 W, FM only, less preamp... \$69.95

100 Watts for 2 Meter HTs

B-310-G
\$179⁹⁵
AES PRICE



Power Curve -- typical B-310-G output power

Watts Out	25	50	75	95	100	100+	100+
Watts In	1/4	1/2	1	2	4	6	8

Power Curve -- typical BD-35 output power

Watts Out (2 Meters)	30	40	45	45+	45+	45+	45+
Watts Out (440 MHz)	16	26	32	35+	35+	35+	35+
Watts In	1	2	3	4	5	6	7

- 45 Watts on 2 Meters/35W on 440 MHz
- Auto Band Selection
- Full Duplex Operation
- FREE mobile bracket
- Single connector for dual band radios
- Reverse polarity protection
- Works with all FM handhelds up to 7 watts
- Auto T/R Switch • "On Air" LEDs
- 5x1 1/4x5 inches

6 Meter Amplifier (50-54 MHz)

FCC Type Accepted



The A-1015-G, \$349.95, is the world's most popular all mode FM/SSB/CW 6 Meter

amplifier. 150 watts out for 10 in. For 1 to 15 watt transceivers.

Low noise GaAsFET preamps

High gain ultra low noise

GaAsFET preamps for

receiving weak signals.

Selectable gain prevents

receiver intermod. 15 to 22

dB gain. Less than 0.8 dB

noise figure. Automatic RF

switching up to 160 Watts.

Choose In-Shack model or

Mast-Mount (includes remote

control) model to reduce loss.

Rugged die-cast enclosure.



Frequency (MHz)	In Shack	Mast Mount
28-30	KP-1/10M	KP-2/10M
50-54	KP-1/6M	KP-2/6M
144-148	KP-1/2M	KP-2/2M
220-225	KP-1/220	KP-2/220
430-450	KP-1/440	KP-2/440

- 100 Watts out with all handhelds up to 8 watts
- All modes: FM, SSB, CW
- Legendary Mirage Ruggedness
- 15 dB low noise GaAsFET preamp
- Reverse polarity protection/SWR Protection

One Year Mirage Warranty

- Commercial Amplifiers • 223-225 MHz
- 420-450 MHz • SWR Wattmeters

Free Catalog: 800-647-1800

MIRAGE

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300 Industrial Park Road

Starkville, MS 39759, USA

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<http://www.mirageamp.com>

VECTRONICS

... the finest amateur radio products made!

World's most versatile 300W Antenna Tuner



VC-300DLP You'll get everything you've ever wanted... precise inductance control that rivals roller inductors... the ability to match any real antenna... full 1.8-30 MHz coverage... peak reading backlit Cross-Needle Meter... 8 position antenna switch... built-in 50 Ohm dummy load... finest components available and world class quality.

More Fine Amateur Products

- AT-100 Tuned Active SWL Antenna... \$79.95
- CK-200 Deluxe CW Keyer w/Curtis chip... \$79.95
- DL-300M 300 Watt Dry dummy load... \$34.95
- DL-650M 1500 Watt Dry dummy Load... \$64.95
- DL-2500 2500 W dry DL w/cooling fan... \$179.95
- VC-300M 300 Watt Mobile Tuner... \$99.95
- VC-300D 300 W Tuner/w digital graph... \$179.95
- HPF-1 High Pass TVI filter 52-550 MHz... \$19.95
- HPF-2 Deluxe high pass TVI filter... \$24.95
- PM-30HF 1.8-60 MHz SWR/Wattmeter... \$79.95
- PM-30UV 144/220/440 SWR/Wtmtr... \$89.95
- LP-30 Low Pass filter, handles 1500 Watts... \$49.95
- LP-2500 Low pass filter, 2500 Watts... \$79.95
- PS-20F 25 amp power supply, 30A surge... \$129.95
- PS-50F 35 amp power supply, 50A srg... \$199.95

3 KW Roller Inductor Antenna Tuner with SSB Digital Bar Graph

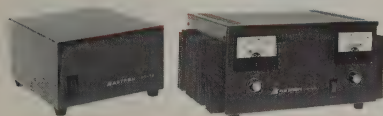


HFT-1500 The VECTRONICS HFT-1500 has three continuously variable components -- two 4.5 kV capacitors and a roller inductor controlled by a precision crafted crank handle and a gear driven 5-digit counter. Tune any antenna 1.8-30 MHz. Lighted D'Arsonval Cross-Needle SWR/Wattmeter, 28 uH roller inductor, 4:1 2.5 kW balun and 20 segment SSB bar graph display.

\$399⁹⁵

VECTRONICS, 1007 Hwy 25 S, Starkville, MS 39759 • Free Catalog 800-363-2922
• Tech: 601-323-5800 • FAX: 601-323-6551 • Visit our Web Site: <http://www.vectronics.com>

ASTRON CORPORATION Power Supplies



The alternative to costly "matching" Supplies!

- 105-125V AC input, 13.8V DC output; internally adjustable from 11-15V • Electronic regulation with fold-back current limiting & crowbar over-voltage protection • Heavy-duty heat sink • 3-wire cord • 1-year Warranty • Made in U.S.A.

Separate voltage & ampere meters on RS-20M, 35M, 50M and 70M. Separate volt & amp meters, plus voltage adjustment (2-15V DC) on VS-20M, VS-35M & VS-50M. RM-35M, RM-50M & RM-60M are Rack Mount models.

Astron Model	Cont. Amps	ICS Amps	Size (in.) H W D	Shipping weight	
RS-7A	5	7	3 1/2 x 6 1/2 x 9	9	\$59 ⁹⁵
RS-10A	7 1/2	10	4 x 7 1/2 x 10 1/2	11	69 ⁹⁵
RS-12A	9	12	4 1/2 x 8 x 10 1/2	13	79 ⁹⁵
RS-20A	16	20	5 x 9 x 10 1/2	18	99 ⁹⁵
RS-35A	25	35	5 x 11 x 11	27	149 ⁹⁵
RS-35A/220V	Same as RS-35A	but 220V input			169 ⁹⁵
RS-50A	37	50	6 x 13 1/2 x 12	46	219 ⁹⁵
RS-70A	57	70	6 x 13 1/2 x 12	48	259 ⁹⁵

With separate Volt & Amp meters

RS-20M	16	20	5 x 9 x 10 1/2	18	119 ⁹⁵
RS-35M	25	35	5 x 11 x 11	27	169 ⁹⁵
RS-50M	37	50	6 x 13 1/2 x 12	46	239 ⁹⁵
RS-70M	57	70	6 x 13 1/2 x 12	48	289 ⁹⁵

Adjustable output; separate Volt & Amp meters

VS-20ML	16	20	5 x 9 x 10 1/2	20	139 ⁹⁵
VS-35M	25	35	5 x 11 x 11	29	189 ⁹⁵
VS-50M	37	50	6 x 13 1/2 x 11	46	259 ⁹⁵

Rack mount models; separate Volt & Amp meters

RM-35M	25	35	5 1/2 x 19 x 12	38	249 ⁹⁵
RM-50M	37	50	5 1/2 x 19 x 12	50	279 ⁹⁵
RM-60M	50	55	7 x 19 x 12	60	359 ⁹⁵

Models with Added Features

RS-4L Has a built-in cigarette lighter receptacle in the front panel. 13VDC @ 4A peak, 3 Amps continuous. 3 1/2" h x 6 1/2" w x 4 1/2" d, 6 lbs. \$49⁹⁵

RS-12S Power supply with built-in speaker. Rated 13VDC @ 12 Amps peak & 9 Amps continuous. 4 1/2" h x 8" w x 9" d, 13 lbs. \$89⁹⁵

Lightweight Switching Power Supplies

SS-25 12V DC, rated 20 Amps continuous, 25 Amps ICS. 3 1/2" h x 7" w x 9" d, 4.2 lbs. \$129⁹⁵

SS-25M As above, with volt/amp meters \$149⁹⁵

SS-30 12V DC, rated 25 Amps continuous, 30 Amps ICS. 3 1/2" h x 7" w x 9 1/2" d, 4 lbs, 8 oz \$149⁹⁵

SS-30M As above, with volt/amp meters \$169⁹⁵

Power Inverters

General Purpose

12/115 Converts 12V DC to 115VAC @ 60 Hz. Provides convenient AC house current in your Boat, Car, Truck, Camper, etc. Powers your ham rig, small household appliances, TV, tools, radios and lights up to 200W continuous, with peaks up to 240W and overload protected. Note: This unit produces a square wave output which is not recommended for devices where high transients are not tolerable. 4 1/2" h x 8" w x 9" d, 9 lbs. \$69⁹⁵

28V Aircraft

2412 Converts 22 to 32V DC input to 13.8V DC output @ 9 amps. Eliminates tapping into a 28V battery for 12V power. \$64⁹⁵

2412-20 As above, but rated at 16 Amps.. \$89⁹⁵



Variable Power Supplies

RP-150 20 Amp Power Supply with the following features:

- 13.8V DC @ 20 Amps continuous
- Adjustable voltage 2V to 15V DC
- Internal Cooling Fan
- Large, Lighted Volt & Amp Meters
- Cigarette Lighter Socket with Cap
- Binding Posts on Front & Rear
- Ripple less than 3.1mV Peak to Peak
- 8 1/2" w x 4 1/2" h x 7 1/2" d, 14 lbs.

\$179⁹⁵

RP-300 30 Amp Power Supply, same as RP-150 but:

- 30 Amps continuous
- Binding Posts & spring-loaded Dual Terminals on front
- Detachable power cord
- 10 1/2" w x 5" h x 11" d, 24 lbs.

\$259⁹⁵



Power Supplies Powerful Values for Ham Operators



105-125V AC INPUT, 13.8 VDC output; perfect for all your Ham radio equipment. A wide selection, including most popular sizes, rugged construction and low prices.

- Solid state, integrated circuitry
- Current-limiting foldback for complete over current protection
- Crowbar Overvoltage protection on 15 amp and larger models
- High quality filtering for very low ripple and low noise, metal cases on all models
- Regulated, output 95% of no-load value

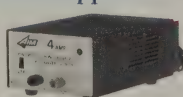
Model#	Cont. amps	ICS	Size (in.)	Wt.	Price
PR-7	5	7	3 1/2 x 6 1/2 x 7 1/2	7	\$49 ⁹⁵
PR-10	7.5	10	4 x 6 x 7 1/2	10	69 ⁹⁵
PR-12	9	12	4 1/2 x 6 x 7 1/2	11	74 ⁹⁵
PR-20	16	20	4 x 6 x 7 1/2	15	99 ⁹⁵
PR-30	24	30	6 x 6 x 10 1/2	23	129 ⁹⁵
PR-40	32	40	6 x 6 x 10 1/2	27	169 ⁹⁵
PR-50	37	50	6 x 6 x 10 1/2	30	199 ⁹⁵
PR-60	48	60	6 x 6 x 10 1/2	33	239 ⁹⁵

AIM Small Power Supplies

38-384 Light Duty DC Power Supply Input: 115V AC. Output: 13.8V DC regulated @ 4A Front panel binding posts, LED "ON" indicator, fuse protection. 7 1/2" d x 4 1/2" w x 3" h, 5 1/2 lbs. \$39⁹⁵

38-305 AC Adapter Provides multiple low-voltage DC to operate various battery powered equipment requiring 3, 4.5, 6, 7.5, 9 or 12V DC @ 500ma. Multiple application plugs and 9V snaps fit most devices. \$9⁹⁵

38-312 Regulated AC Adapter Multi-voltage with multiple plugs and 9V snaps. Provides 1.5, 3, 4.5, 6, 7.5, 9 or 12V DC regulated @ 1200ma. to operate a wide range of battery operated devices \$29⁹⁵



MFJ Mighty lite™

Switching Power Supplies

- Super small • Super lightweight • Volt/Amp meters • Front panel voltage control (0-15V)
- Five-way binding posts & cigarette lighter socket on front panel • Two-sets of quick-connects on rear panel • Large 3" dual illuminated meters • Overvoltage & over Current protection • Cooling Fan • Fused, switchable AC Input (85-135V & 170-260V AC)



4225MV

22 Amps continuous
25 Amps max. - 3.7 lbs
5 1/2" w x 4 1/2" h x 6 1/2" d

\$139⁹⁵



4245MV

40 Amps continuous
45 Amps max. - 5.5 lbs
7 1/2" w x 4 1/2" h x 6 1/2" d

\$189⁹⁵

4035MV Heavy-duty Conventional Power Supply

MASSIVE TRANSFORMER delivers 35 Amps max. & 30 Amps cont. with ease.



- Front panel adjustable voltage (1 to 14VDC)
- Dual lighted volt & amp meters • Three sets of output terminals including a pair of heavy duty five-way binding posts & cigarette lighter socket
- Internal cooling fan - speed increases when load current increases • Overvoltage, fold back short circuit protection & Over-temperature protection • 9 1/2" w x 6 1/2" h x 9 1/2" d, 19.2 lbs. \$139⁹⁵

DM-340MVT Power Supply



Input: 120V AC 50/60Hz
Output: 13.8V DC (0-15V adjustable)

Rated: 30A Cont./35A Max.
Voltage Regulation: Under 2%
Ripple Voltage: Under 30mVp-p
Protection: Automatic Shutdown over 35A

- Volt & Amp Meters • Cooling Fan
- Binding Posts • Quick-connects
- Cigar lighter socket
- 9" w x 6 1/2" h x 9 1/2" d, 19 lbs. \$179⁹⁵

BK PRECISION MAXTEC INTERNATIONAL CORP.



General Purpose Lab Quality Supplies

- Reverse polarity, overload, thermal and short circuit protected • Tight regulation and low ripple
- Conservatively rated for continuous operation at maximum rating.

1686 High Current (left) Output: 3 to 14VDC @ 2.5 to 12 Amps. Continuous 12 Amps at 13.8V DC without overheat. Reverse polarity, overload and short circuit protection. Current limiting. Connect two in parallel to double the current, or two in series to double the voltage. Voltage and current limiting adjustments. 5 1/2" x 5 1/2" x 12", 12 lbs. \$169⁹⁵

1651 Triple Output (right) Outputs: Two 0 to 24 VDC @ 0.5Amp; One fixed 5V @ 4 Amps continuous. Independent tracking, adjustable current limiting. Short circuit, overload, reverse polarity protection. 3 1/2" x 9 1/2" x 7 1/2", 11 lbs. \$359⁹⁵

MFJ Switching Power Supplies

Power your HF transceiver, 2 Meter/440 MHz mobile/base and accessories with these new 25 or 45 Amp MFJ MightyLite™ Switching Power Supplies! **No RF hash . . . Super lightweight . . . Super small . . . Volt/Amp Meters . . .**



MFJ-4225MV
25 Amp **\$139⁹⁵** AES PRICE

MFJ's new adjustable voltage switching power supplies do it all! You can power your HF transceiver or 2-Meter/440 MHz mobile or base and accessories.

MFJ's *MightyLites™* are so lightweight and small you can carry them in the palm of your hand! Take them with you anywhere.

No more picking up and hauling around heavy, bulky power supplies that can give you a painful backache, pulled muscle or hernia.

MFJ's 25 Amp *MightyLite™* weighs just 3.7 lbs. -- that's 5 times lighter than an equivalent conventional power supply.

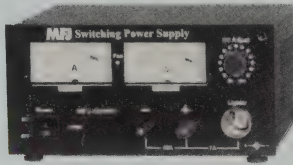
MFJ's 45 Amp version is even more dramatic -- 8 times lighter and weighs just 5.5 pounds!

No RF hash!

These babies are clean . . .

Your buddies won't hear any RF hash on

NEW!



MFJ-4245MV
45 Amp **\$189⁹⁵** AES PRICE

your signal! You won't hear any in your receiver either!

Some competing switching power supplies generate objectionable RF hash in your transmitted and received signal.

These super clean MFJ *MightyLites™* meet all FCC Class B regulations.

Low ripple . . . Highly Regulated

Less than 35 mV peak-to-peak ripple under 25 or 45 amp full load. Load regulation is better than 1.5% under full load.

Fully Protected

You won't burn up these power supplies! They are fully protected with Over Voltage and Over Current protection circuits.

Worldwide Versatility

MFJ *MightyLites™* can be used anywhere in the world! They have switchable AC input

voltage and work from 85 to 135 VAC or 170 to 260 VAC. Easily replaceable fuse.

MightyLites™ . . . Mighty Features

MFJ *MightyLites™* feature a front-panel voltage control. It lets you vary the output voltage from 9 to 15 Volts DC and gives you a highly regulated voltage output.

You get an easy access front-panel with five-way binding posts for heavy duty use and a cigarette lighter socket for mobile accessories. The MFJ-4245MV has two sets of quick-connects on the rear for accessories.

Large 3 inch dual meters are brightly illuminated to make it easy to monitor load voltage and current.

A *whisper quiet* internal fan efficiently cools your power supply for long life.

Two models to choose from . . .

MFJ-4225MV, \$139.95. 25 Amps maximum or 22 Amps continuous. Weighs 3.7 pounds. Measures 5 1/4" x 4 1/2" x 6D inches.

MFJ-4245MV, \$189.95. 45 Amps maximum or 40 Amps continuous. Weighs 5.5 pounds. Measures 7 1/2" x 4 1/2" x 9D inches.

MFJ No Matter What™ Warranty

MightyLites™ are covered by MFJ's famous *No Matter What™* one year limited warranty. MFJ will repair or replace (at our option) your power supply for one full year.

MFJ 35/30 Amp Adjustable Regulated DC Power Supply

Massive 19.2 pound transformer . . . No RF hash . . . Adjustable 1 to 14 VDC . . .



NEW!

MFJ-4035MV
\$139⁹⁵ AES PRICE
MFJ's heavy duty conventional power supply is excellent for powering your HF or 2 Meter/440 MHz transceiver and accessories.

A massive 19.2 pound transformer makes this power supply super heavy duty! It delivers 35 amps maximum and 30 amps continuous without even flexing its muscles. Plugs into any 110 VAC wall outlet.

It's highly regulated with load regulation better than 1%. Ripple voltage is less than 30 mV. **No RF hash** -- it's super clean!

Fully protected -- has over voltage protection, fold back short circuit protection and over-temperature protection.

You get front panel adjustable voltage from 1 to 14 VDC with a convenient detent set at 13.8 VDC. A pair of front-panel meters

let you monitor voltage and current.

Three sets of output terminals include a pair of heavy duty five-way binding posts for HF/VHF radios, two pairs of quick-connects for shack accessories and a covered cigarette lighter socket for mobile accessories.

A front-panel fuse holder makes fuse replacement easy. *Whisper quiet* fan speed increases as load current increases -- keeps components cool. 9 1/2" x 6H x 9 1/4 inches.

Your MFJ-4035MV is protected by MFJ's famous *No Matter What™* one year limited warranty. MFJ will repair or replace (at our option) your power supply for one full year.

MFJ High Current Multiple DC Power Outlets

Power two HF/VHF transceivers and six or more accessories from your 12 VDC power supply

AES PRICE MFJ-1118
\$69⁹⁵



MFJ-1118, \$69.95. This is MFJ's most versatile and highest current *Deluxe Multiple DC Power Outlet*. It lets you power two HF and/or VHF transceivers and six or more accessories from your transceiver's main 12 VDC power supply.

Two pairs of *super heavy duty* 30 amp 5-way binding posts connect your transceivers. Each pair is fused and RF bypassed. Handles 35 Amps total. "ON" LED.

Six pairs of heavy duty, RF bypassed 5-way binding posts let you power your accessories. They handle 15 Amps total, are protected by a master fuse and have an

ON/OFF switch with an "ON" LED indicator.

Built-in 0-25 VDC voltmeter. You get 6 feet of super heavy duty eight gauge color-coded cable with ring tongue terminals. Binding posts are spaced for standard dual banana plugs.

Heavy duty aluminum construction. 12 1/2" x 2 3/4" x 2 1/2 inches.

MFJ-1116, \$44.95. Similar to MFJ-1118. No 30 amp posts. Has "ON" LED and 0-25 VDC voltmeter. 15 amps total.

MFJ-1112, \$29.95. Similar to MFJ-1116. No on/off switch, LED, meter, fuse.

MFJ-1116
\$44⁹⁵ AES PRICE



MFJ-1112
\$29⁹⁵ AES PRICE



Free MFJ Catalog
800-647-1800

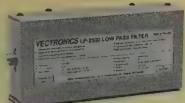
<http://www.mfjenterprises.com> FAX: (601) 323-6551
• 1 year *No Matter What™* warranty Add s/h

MFJ ENTERPRISES, INC.
P.O. Box 494, Miss. State, MS 39762
(601) 323-5869; 8-4:30 CST, Mon-Fri
Technical Help: (601) 323-0549

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MFJ . . . the world leader in ham radio accessories!

VECTRONICS Amateur Radio Products



TVI FILTERS

LP-30 Low Pass Filter (right) Suppresses TV interference from HF transmitters operating below 30MHz. Use between transmitter and the antenna or tuner to provide up to -70dB attenuation of harmonics that fall within the TV bands. For 52Ω coaxial systems, up to 30MHz and 1500W RF, continuous **\$49⁹⁵**

LP-2500 (left) Rated for 2.5KW continuous **\$79⁹⁵**
HPF-1 High Pass Filter installs at the TV set antenna terminals to reduce television interference caused by overload & harmonics from HF transmitters operating below 30MHz. High harmonic attenuation with low loss in the 52-550MHz TV passband. Unique shield-breaking circuit prevents antenna cable from acting like an HF antenna. For 300Ω system but also supplied with baluns and Type F connectors for 75Ω coax **\$19⁹⁵**

DUMMY LOADS



DL-300M Dry Dummy Load Simulates an accurate 50Ω antenna up to 150 MHz. Test your transmitter without radiating a signal. Power handling curve rated at 300W for 15-seconds, 100W for 40 seconds. VSWR <1.3:1 at 150MHz. 5" h x 2" d x 2 1/2" h, 8 oz **\$34⁹⁵**



DL-650M Dry Dummy Load Good all the way up to 650MHz. Power handling curve is rated at 1500W for 10-seconds, down to 100W for 10-minutes. VSWR <1.3:1 at 500MHz **\$64⁹⁵**



DL-2500 Dry Load (Hi-Power) A fan cooled heavy-duty load for up to 150MHz. Power handling curve rated at 2500W for 1-minute, down to 500W for 10 minutes **\$179⁹⁵**



ANTENNA TUNERS

VC-300M Mobile Tuner (right) Compact, lightweight and economical for base or mobile. Use. Tuners verticals, dipoles, inverted Vs, beams and mobile whips that are fed by coaxial cable. Also tunes open wire feeders, balanced lines, or single wires. Covers 1.8 to 30 MHz at 300W continuous power. The dual-movement cross-needle meter simultaneously monitors RF power output & SWR. 7 1/2" w x 3 1/2" h x 8 3/4" d, 2 1/2 lbs **\$99⁹⁵**

VC-300DLP Antenna Tuner (left) A quality, economical tuner. Covers 1.8-30 MHz at 300W continuous power capability from 3.5-30MHz & 150W on 1.8MHz. Built-in dummy load, dual-movement cross-needle peak or average reading meter. Compatible with almost any antenna - coax fed, balanced or single wire. Built-in 4:1 balun and six-position antenna selector switch 10 1/2" w x 9 1/2" d x 3 1/2" h, 3 1/2 lbs **\$149⁹⁵**



VC-300D Antenna Tuner (right) Same functions & specifications as the VC-300-DLP shown above, but has the additional capability to show a peak power indication by using an instantaneous responding digital bargraph meter display. A LEVEL and DELAY control has been added to calibrate the display to the meter, and to vary the delay response **\$179⁹⁵**

HFT-1500 Antenna Tuner (left) Rated for 1500W from 1.8-30MHz; 1000W (2KW PEP) on 160 & 10M. Features a cranked continuous roller inductor with a turns counter and vernier tuning on the antenna and input capacitors. The dual-movement cross-needle meter shows average forward and reverse power and SWR; a 21-segment bargraph indicates peak power. A true RF directional coupler sensor is used for the wattmeter circuitry. Includes a built-in 4:1 balun for balanced antenna systems and 6 position antenna selector switch. 5 1/2" w x 12 1/2" h x 12" d, 10 lbs **\$399⁹⁵**



40 to 2M Mobile Antenna

CA-HV (left) Designed specifically for use with the new radios that cover HF thru 2M. Choose either 1 or 2 of the following HF coils: 40/(*20)/15/10 meters along with constant operation on 6 & 2M. Unique fold-over hinge brings the antenna down to about 6" in height for entering garages. Mounts to most SO-239 type trunk mounts, and is about 6 ft. tall with the 40M resonator on the top.

COMET makes several duplexer combinations. The CF-530 to combines both the HF/6 meter and 2 meter radio connectors into a single connector going to the CA-HV. Should you want to use separate HF, 6 Meter and 2 Meter antennas, the COMET CF-360B duplexer will separate the HF/6 meter radio connector back into an SO-239 for HF and SO-239 for 6 meters

CA-HV Antenna. **\$129⁹⁵** *20M coil optional

L-14 14MHz coil **\$36⁹⁵**

CF-530 HF/2M-440MHz Duplexer **\$74⁹⁵**

CF-360B HF/6M-440MHz Duplexer **\$69⁹⁵**

HA-4S HF Mobile Antenna (right)

Features switching between 4 HF bands without changing coils or plugs. Standard coils include 40, 15, 12, 10M (20M optional). Compact and lightweight, only 1 lb, 14 oz, and just 4 ft. 10 in. tall which allows for more convenient HF mounting options than conventional HF mobile antennas. Mounts on a trunk-clip style bracket such as the Comet RS-820 (shown), or a rain gutter mount such as the RS-80. High quality construction includes a gold-plated PL-259 at the base, and a threaded collar that unscrews to expose a hinged base, allowing a 90 degree fold-over for garaging. **\$179⁹⁵**



WS-1M Window Mounting Bracket

Perfect for vehicles with pop-out windows, rental cars, etc. Adjustable, with suction cups on the inside and outside. Includes 11 ft. of coaxial cable with connectors. Heavy-duty, allows for mounting giant-type antennas such as the Comet B-20 or Comet SB-5 dualbander models, etc **\$64⁹⁵**



NCG Power Pocket

Handy portable power for Emergencies, Hamfests, Hiking, etc. A 12-volt @ 2 amp/hour sealed lead-acid rechargeable battery provides extended talk time, up to 6 times longer than standard battery packs, and can be recharged to 100% anytime without the usual memory effect. Your radio conveniently plugs into the included female adapter socket. Contained in a compact carrying case with belt loop and shoulder strap, and the entire pack weighs only 30 oz. Complete recharge in 6 to 8 hours, with the supplied charger. 3 1/2" w x 1" d x 6 1/2" h, 30 oz **\$66⁹⁵**



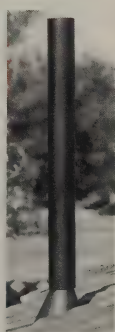
NCG Light-weight boom microphone & headset combination for popular handheld radios. Conveniently folds-up for easy storage. Boom microphone pivots to allow left or right ear speaker position. Includes push-to-talk switch and 36" cord.

MP-28 Icom, Standard Yaesu, Alinco version **\$39⁹⁵**

MP-28K Kenwood **\$39⁹⁵**

Forbes Group Ventenna™

Get around those antenna restrictions and finicky neighbors. The Ventenna is virtually unnoticeable because it looks like part of the normal structure. To install, just slip it over an existing 1" to 2 1/2" plumbing vent pipe, connect up your coax and you're on the air.



Ready to go! - No Tuning or Measuring required.

Single band models for 2 meters, 220MHz or 440MHz & a 2M/440MHz Dual Bander.

VT-14 2 meters, 3 ft. tall, 2.6dB gain **\$49⁹⁵**

VT-22 220MHz, 25" tall, 2.6dB gain **\$49⁹⁵**

VT-27 2m/440MHz Dual bander **\$74⁹⁵**

VT-44 440MHz, 14" tall, 2.6dB gain **\$49⁹⁵**

VT-15S Scanner model 3 ft. tall, 2.6dB **\$49⁹⁵**



DC SALES

Tenna Hitch A heat treated, high strength aluminum bracket with an insulated 3/8" x 24 mounting stud. Installs under the ball of any Class-I or II trailer hitch. Handles the largest mobile antennas, and does not interfere with trailer towing capability. No holes to drill. All hardware is supplied **\$35⁹⁵**

GAMBER-JOHNSON

SS-100 Convenient, avoid theft! Radio slides in and out of mount instantly without having to attach or remove cables. The Power, Ground, Antenna, and Speaker leads connect and disconnect automatically! RF components are designed for a low SWR up to 500MHz. Adapts to most radios; the bracket adjusts to case size and can be conveniently attached above or below the radio unit **\$69⁹⁵**
SS-101 Extra base for multiple vehicle use **\$42⁹⁵**

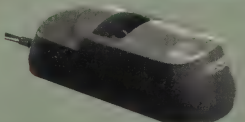


Charges Kenwood PB-13, PB-14, PB-17 & PB-18 handheld batteries in 60 to 100 minutes.

BC-15A looks similar to model pictured.

\$29⁹⁵ While they Last!

KENWOOD
BC-15A Desk Charger
CLOSEOUT





BIRD Electronic Corporation

43 THRU LINE® Wattmeter
Measures incident & reflected power in coaxial transmission lines with 5% of full scale accuracy; insertion VSWR is less than 1.05.

Comprised of a line section, and a direct-reading meter with expanded scales in 25, 50 and 100 units. Rugged, durable aluminum case.

Supplied with SO-239 Quick Change (QC) type connectors with optional N and BNC types available.

Optional plug-in elements provide a wide choice of frequency ranges from 2-1000MHz, with power levels up to 5KW from 2-30MHz and up to 1KW from 30-1000MHz. Select one or more elements now, add others as needed. 6 1/2" h x 5 1/2" w x 3 3/8" d, 3 lbs. • **\$263⁹⁵**

4431 THRU LINE® Wattmeter

Same as the 43, has a built-in variable RF signal sampler to provide an adjustable low level signal sample for counters, scopes, analyzers, etc... • **\$464⁹⁵**

43P Peak Reading Wattmeter

Same versatile functions as the BIRD 43, but includes switch selectable Peak Reading (PEP) capability. Uses the same plug-in elements, QC connectors & accessories. Requires two 9V batteries.. • **\$396⁹⁵**



See Price List for BIRD accessory pricing

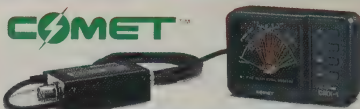
TABLE 1 Standard BIRD Elements

Power Range	2-30	25-60	50-125	100-250	200-500	400-1000
5 watts	—	5A	5B	5C	5D	5E
10 watts	—	10A	10B	10C	10D	10E
25 watts	—	25A	25B	25C	25D	25E
50 watts	50H	50A	50B	50C	50D	50E
100 watts	100H	100A	100B	100C	100D	100E
250 watts	250H	250A	250B	250C	250D	250E
500 watts	500H	500A	500B	500C	500D	500E
1000 watts	1000H	1000A	1000B	1000C	1000D	1000E
2500 watts	2500H					
5000 watts	5000H					

TABLE 2 Low-Power BIRD Elements

1 watt	Cat. No.	2.5 watts	Cat. No.
25-30 MHz	025-1	25-30 MHz	025-2
30-35 MHz	030-1	30-35 MHz	030-2
35-40 MHz	035-1	40-50 MHz	040-2
40-50 MHz	040-1	50-60 MHz	050-2
50-60 MHz	050-1	60-80 MHz	060-2
60-80 MHz	060-1	80-95 MHz	080-2
80-95 MHz	080-1	95-150 MHz	095-2
95-125 MHz	095-1	150-250 MHz	150-2
110-160 MHz	110-1	200-300 MHz	200-2
150-250 MHz	150-1	250-450 MHz	250-2
200-300 MHz	200-1	400-850 MHz	400-2
275-450 MHz	275-1	800-1000 MHz	801-2
425-850 MHz	425-1		
800-1000 MHz	801-1		

Variable RF Signal Samplers
Stand alone wide-range, THRU LINE® RF coupling probes for spectrum analysis, RF signal observation on a scope, or frequency counting and control.



SWR/Power Meters

Three models, with separate meter and RF sensor with 6 ft. long cable. Lighted, cross-needle meter with three selectable power ranges, shows forward and reflected power, and SWR simultaneously, plus indicates DC voltage from power source. 50 Ω , 12VDC. 4 1/2" w x 3 1/2" h x 1 1/2" d, 1 lb, 4 oz.

CMX-1 1.8-60MHz; 30, 300, 2kW ranges **\$189⁹⁵**

CMX-2 1.8-200MHz; 20, 50, 200W ranges **\$179⁹⁵**

CMX-3 140-525MHz; 20, 50, 200W ranges **\$169⁹⁵**



NCG-3000 Bench SWR & Power Meter

Covers the range from 118 to 530MHz. Large illuminated meter, 5W-20W & 200W power ranges, both average and PEP. 12V DC 7 1/2" w x 3 1/2" h x 4 1/2" d, 2 lbs **\$99⁹⁵**

More Comet & NCG meters - see Price List



DIAMOND ANTENNA SWR/Power Meters

Five models, measure Power & SWR with 5-10% of full scale accuracy. Illuminated meter, sensor switch & LED indicator. Power ratings listed below are for intermittent operation. For continuous mode (CW, FM, etc.), ratings vary with frequency. All have SO-239 connectors, except the SX-1000 which has a type-N. The SX-600 and SX-1000 are dual-band. 12VDC is required for displays. 6" w x 2 1/2" h x 4" d, 2 lbs.

SX-100 1.6-60MHz, 30/300/3kW ranges **\$134⁹⁵**

SX-200 1.8-200MHz, 5/20/200 ranges **\$94⁹⁵**

SX-400 140-525MHz, 5/20/200W ranges **\$114⁹⁵**

SX-600 1.8-160MHz and 140-525MHz, 5/20/200W ranges **\$169⁹⁵**

SX-1000 1.8-160MHz and 430-1300MHz, 5/20/200W ranges **\$214⁹⁵**

VANCO Low Cost Meters



SWR-1 Field strength/SWR meter

Range: 3.5-150MHz; Impedance: 52 Ω ; SWR: 1:1-3:1; Accuracy: 5%; Meter Sensitivity: 300uA; RF Pick-up: 5' whip; 6" h x 2" w x 2 1/2" d, 14 oz. **\$19⁹⁵**

SWR-2 SWR/Power meter

Range: 1.7 to 150MHz; Impedance: 50-52 Ω ; SWR: 1:1-3:1; RF Power: 0-10 and 0-100 watts; Accuracy: (SWR) \pm 5% (Power) 10%; Sensitivity: 200 uA; Size: 6" w x 2" h x 2" d, 14 oz. **\$29⁹⁵**

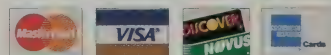
SWR-3 SWR meter

Frequency Range: 1.7 to 30MHz; Impedance: 50-52 Ω ; SWR: 1:1-3:1; Accuracy: \pm 5%; Meter Sensitivity: 300uA; Size: 2 1/2" x 3 1/2" x 3", 6 oz. **\$14⁹⁵**

Toll Free: **1-800-558-0411**

e-mail: help@aesham.com

On the Web: www.aesham.com



MFJ ENTERPRISES, INC. SWR/Power Meters

864 (bottom) Covers 1.8 to 60MHz, 144MHz & 440 MHz bands. Dual sensors - connect your HF & VHF/UHF rigs at the same time and monitor SWR & Power of either. Lighted Cross-Needle meter indicates 30/300W forward and 6/60W reflected power simultaneously. Uses 12V DC for meter light. 7 1/2" w x 2 1/2" h x 2 1/2" d **\$79⁹⁵**

862 (middle) Similar to the 864, but covers 144MHz, 220MHz & 440MHz. Ranges: 30/300 watts forward and 6/60 watts reflected. 5 1/2" w x 2 1/2" h x 2 1/2" d **\$49⁹⁵**

860 (top) Similar to the 864, but covers HF - 1.8 to 60MHz. Ranges: 30/300 watts forward and 6/60 watts reflected. 4 1/2" w x 2 1/2" h x 3" d **\$39⁹⁵**

815B Features a large 3 inch lighted Cross-Needle meter. Gives accurate SWR & peak or average power readings from 1.8-60 MHz. Power Ranges: 200/2000 watts forward and 50/500 watts reflected. Push button selects range, meter on/off and peak/average power. Meter uses 12V DC. 7 1/2" w x 2 1/2" h x 2 1/2" d **\$69⁹⁵**

817 Looks and features similar to 815B but covers 144 & 440MHz bands. Power Ranges: 200/20 forward and 50/5 watts reflected. 7 1/2" w x 2 1/2" h x 2 1/2" d **\$79⁹⁵**

812B Indicates forward & reflected power on 2M & 220MHz & SWR 14-220MHz, plus field-strength 1-220MHz. Ranges: 30/300W ranges & 4" w x 2 1/2" h x 3" d **\$29⁹⁵**

816 Indicates forward & reflected power from 1.8-30MHz. Ranges: 30/300W. 4 1/2" w x 2 1/2" h x 3" d **\$29⁹⁵**



MIRAGE SWR/Power Meters

Four models, all measure RMS & peak forward & reverse power & SWR, directly without charts or calculations. Negligible insertion loss. Remotable coupler, SO-239 connectors. Requires 9V battery, or AC adapter. Low battery indicator. 5 1/2" x 4 1/2" w x 5 1/2" d, 3 1/2 lbs.

MP-1 1.8 to 30 MHz; 25, 200, 2KW ranges.... **\$219⁹⁵**

MP-2 50 to 200MHz; 50, 500, 1.5KW ranges.... **\$219⁹⁵**

MP-3 425 to 450MHz; 5, 50, 150W ranges **\$249⁹⁵**

MP-4 1260 to 1300MHz; 1, 10, 100W ranges .. **\$295⁹⁵**

VECTRONICS

SWR & Power Meters

PM-30HF Similar to shown. RMS or PEP forward & reflected power and SWR simultaneously. Illuminated Cross-Needle meter. 1.8 to 60MHz, 300 and 3000 watt ranges. 5 1/2" w x 3 1/2" h x 5 1/2" d, 1.2 lbs. **\$79⁹⁵**

PM-30UV (shown) Same features as the 30HF, but covers 144, 220 and 450MHz bands **\$89⁹⁵**



YAESU SWR/Power Meters

YS-60 Monitors Average (CW) and Peak (SSB) transmitter output, and VSWR of antenna systems. Covers 1.6-60MHz up to 2KW with meter ranges of 20/200 & 2000W. 50 Ω , SO-239 connectors. Requires 12V DC for meter lamps and internal operational amplifier. 4 1/2" w x 2 1/2" h x 3 1/2" d, 1 1/2 lbs **\$129⁹⁵**

YS-500 Similar to YS-60, but covers 140-525MHz, 4/20/200W ranges. 12V is not required **\$109⁹⁵**



STARTEK FREQUENCY COUNTERS

STARTEK ATH Series Frequency Counters are Subcompact, Pocket-size units, designed for ease of use and dependable operation. The Low Cost of these instruments belies the Quality Construction and innovative features found throughout.

STARTEK counters are used to find transmitting frequencies, locate RF sources, check all sorts of transmitting equipment for operation and frequency calibration. They are used with antenna analyzers for antenna tuning and to check or monitor the output frequency of transmitters, signal generators, etc.



ATH series counters have High-Speed Response and a special **AUTO TRIGGER & HOLD** feature. They can display and hold the frequency of a signal in less than 1/10 second. All have two MMIC amplifiers and ultra high sensitivity - less than 1 mV over most of the range. All have anodized aluminum cabinets with machine thread screws, auto polarity power input (9-12VDC), 6 sample times, a manual **HOLD** switch, Ni-Cad batteries & 110V AC adapter. Made in the USA.

ATH-15 1-1500 MHz. 2 inch, 10 segment signal strength Bar Graph, low battery indicator.\$189⁹⁵

ATH-30 1-2800MHz. Signal strength Bar Graph, low battery indicator, reset control & ONE-SHOT feature (single read & hold, does not allow subsequent signal to displace reading, switch selectable).\$249⁹⁵

ATH-50 5-2800 MHz (2.8GHz). Has HIGH IMPEDANCE input (1 megohm) from 5 Hz to 50 MHz that can be used with probe without excessive circuit loading. Also Bar Graph, low battery indicator, ONE-SHOT and reset control. This compact model does more than most bench counters.\$299⁹⁵

OPTION HST-15 High accuracy option, ± 0.2 PPM TXCO timebase, 18-40°C. Order the ATH-30/50 counters with this optionadditional \$100⁰⁰

BAND PASS FILTERS Four filters available to extend readability distance:

LP-60 DC-60MHz; **BP-150** 130-500MHz; **HP-400** 400-1500MHz; **HP-800** 800-2000MHz.....each \$49⁹⁵



STARTEK ACCESSORIES - include a Zipper Case, various antennas, probes, Band Pass Filters, vehicle power adapter, etc.

See Price list for complete listing.

For more technical info:

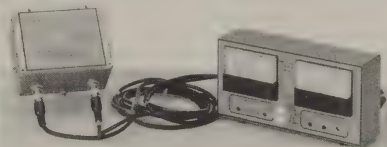
STARTEK Help Line: (954) 537-5577

Affordable... RF Applications, Inc. High Performance & High Quality RF Power Measurement Systems



P-3000 HF Power & VSWR Indicator

Microprocessor based for fast, accurate Power & VSWR readings from 1.8 to 30MHz and 15 to 2950 watts - without adjustments or calibration. *Three separate instruments in One:* Peak Digital Power Display, VSWR Display with Alarms & 10-LED Instantaneous Power Bargraph. During high VSWR conditions a relay can interrupt the control line to linear to reduce the chance of damage. Separate remote directional coupler locates up to 6 ft. away. 50Ω input/output, SO-239 connectors. Requires 12V DC @ 250mA. Display: 6 $\frac{1}{2}$ "w x 5 $\frac{1}{2}$ "h x 2 $\frac{1}{4}$ "d; Coupler: 4 $\frac{1}{2}$ "w x 3 $\frac{1}{2}$ "h x 2 $\frac{1}{4}$ "d, 6 lbs total.\$299⁹⁵



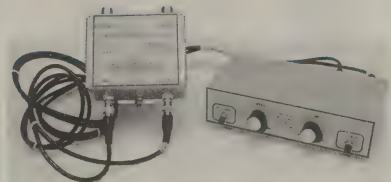
P-2000A RF Power & VSWR Indicator

For HF applications from 1.8 to 30MHz and up to 2000W RF output. It has an adjustable meter response time and uses the same remote coupler as the P-3000 unit. An adjustable VSWR setting and a relay are provided that can be used to disable an amplifier under high VSWR conditions. Display: 8"w x 4 $\frac{1}{4}$ "h x 2 $\frac{1}{2}$ "d; Coupler: 4 $\frac{1}{2}$ "w x 3 $\frac{1}{2}$ "h x 2 $\frac{1}{4}$ "d\$299⁹⁵



Match Alert™ VSWR Monitor & Alarm

Protection for HF transmitting systems! A microprocessor monitors antenna VSWR and provides a fast visual and electrical alarm if any of eight different dipswitch selectable VSWR presets are exceeded. Covers 1.8-30MHz and is rated at 3000W. A relay contact is available via a 3 ft. cable for millisecond control of an external function such as shutting down an amplifier, etc. Cast aluminum enclosure, PL-259 connectors, requires 11-16V DC. PL-259 connectors...\$129⁹⁵



P-2000CW RF Power/VSWR Indicator

Uses an audible Morse Code interface to report the values of forward and reflected power. These values are stored during and at the end of each transmission and can be reported via CW while on the air or after the transmission. If the VSWR exceeds a preset value, the operator is alerted with the Morse "V" character, and a relay can provide control to disable a power amplifier, etc. Covers 1.8 to 30 MHz & indicates from 5 to 2000W Power & VSWR level. 12V DC. Display: 8"w x 4"h x 2"d. Remote Coupler: 4 $\frac{1}{2}$ "w x 3 $\frac{1}{2}$ "h x 2 $\frac{1}{4}$ "d, 4 lbs ... \$249⁹⁵

P-1500 Digital RF Power & V.S.W.R. Indicator

Covers 1.8 -30MHz, rated at 1.5kW continuous. Built-in coupler. 4-digit LED display, autoranging bargraph. VSWR status lights. 12VDC/100mA 4"w x 3 $\frac{1}{2}$ "h x 4"d, 4 lbs.\$219⁹⁵



DC Adapters

P-3000-P 12V adapter for P-3000, P-2000A

& P-2000CW\$12⁹⁵

P-1500-P 12V adapter for P-1500.....\$16⁹⁵

Information Direct:

www.rfapps.com

MFJ MFJ ENTERPRISES, INC. Antenna Analyzers

MFJ-259 HF/VHF SWR Analyzer with RF Resistance Meter

Four test instruments in one: an accurate RF signal generator, a high resolution 170MHz frequency counter, RF Resistance Meter™ and an SWR Analyzer™.

Portable - totally self-contained.

Over the range from 1.8 to 170MHz - find your antenna's true resonant frequency from the shack or make adjustments right at the antenna. Tune critical HF mobile antennas in

seconds. Measure antenna 2:1 bandwidth on a single band, or analyze multi-band performance. Measure inductance, capacitance, resonant frequency of tuned circuits. Find transmission line velocity factor, impedance and loss.

Test RF chokes, transformers, baluns. Adjust tuners without transmitting. Easy-to-read 10-digit LCD frequency counter and smooth vernier tuning. Uses 8 "AA" batteries. 6 $\frac{1}{2}$ "h x 4"w x 2 $\frac{1}{2}$ "d\$219⁹⁵

MFJ-249 Looks like MFJ-209 (right). All features of the MFJ-259 except no RF Resistance meter...\$199⁹⁵

MFJ-209 1.8-170MHz SWR Analyzer

Same as the MFJ-249 without LCD frequency counter. Has jack for connecting external frequency counter.\$99⁹⁵

MFJ-204B Antenna Bridge Quickly optimize 1.8 to 30MHz antennas for peak performance.

Portable - take to your antenna site. Determine if you antenna is too long or too short, measure resonant frequency and resistance to 500Ω Built-in resistance bridge, null meter, tunable oscillator-driver. Uses 9 volt battery. 4"h x 2"w x 2"d . \$79⁹⁵



MFJ-205 Resistance Meter Find antenna resonant frequency by tuning the frequency

control for a minimum meter reading, read feedpoint resistance directly from a calibrated meter. Reads up to 500Ω and covers all ham bands 160 thru 10 meters. Has jack for external frequency counter. Can be used as an RF signal generator. 7 $\frac{1}{2}$ "h x 2 $\frac{1}{2}$ "w x 2 $\frac{1}{4}$ "d. Uses 9V battery..... **AES CLOSEOUT \$69⁹⁵**





390 Test Bench™ (left) A multimeter, with AC/DC Voltmeter, AC/DC Ammeter, Ohmmeter, Capacitance Meter, 500kHz Frequency Counter and Temperature Meter in one package. 0.1% DCV accuracy; Analog bargraph; Auto/manual ranging; 4,000 count LCD display; Relative mode; Min-max average; Memory; Automatic continuity; Data hold. $7\frac{1}{2}'' \times 3\frac{1}{2}'' \times 1\frac{1}{2}''$, 17 oz. ... **\$134⁹⁵**

2860A Digital Multimeter (center) Rugged construction with water resistant case. Functions: AC/DC Voltmeter; AC/DC Ammeter (20A); Ohmmeter; Audible Continuity Check; Diode Tester. $\frac{3}{4}$ -digits, easy to read 0.8" LCD. $6\frac{1}{2}'' \times 3\frac{1}{2}'' \times 1\frac{1}{2}''$, 12 oz. ... **\$99⁹⁵**

2704A Digital Multimeter (right) Measures: DCV 200mV-1000V; ACV 200mV-750V; DC and AC current to 10A; Ohms, 0.1 Ω to 20M Ω ; Capacitance to 20 μ F; and Transistor gain. $5\frac{1}{2}'' \times 3'' \times 1\frac{1}{2}''$, 13 oz. ... **\$59⁹⁵**



878 Dual-Display LCR Meter with Statistical Functions (left). Excellent for sorting parts. Displays measured value & Q or dissipation factor and remembers minimum and maximum values while keeping a running average of tested component values. Relative mode displays difference between the measured and reference component values. Tolerance mode "beeps" to indicate measured components outside a 1%, 5% or 10% tolerance around a reference value. Selectable, 120Hz or 1kHz. $1\frac{1}{2}'' \times 3\frac{1}{2}'' \times 7\frac{1}{2}''$, 14 oz. ... **\$219⁹⁵**

875 Parts Tester (center) Tests transistors, SCRs, diodes, LEDs & batteries under actual load conditions. Capacitance 0.1pF-20mF; Resistance 0.1 Ω -20M Ω , 26 ranges. 0.8" LCD. $6\frac{1}{2}'' \times 3\frac{1}{2}'' \times 1\frac{1}{2}''$, 12 oz. ... **\$99⁹⁵**

4011 5 MHz Function Generator (right). Generates sine, triangle, square, pulse and ramp waveforms. TTL & CMOS Pulse outputs. $9\frac{1}{2}'' \times 3\frac{1}{2}'' \times 11\frac{1}{2}''$, 6 lbs **\$239⁹⁵**

Scopes & Counters

For design, service or hobby. Scopes ranging from a 20MHz analog dual-trace unit to a versatile digital storage model. Multi-function counters built for consistent high accuracy over a wide range of frequencies.

See Price List for a complete B&K listing

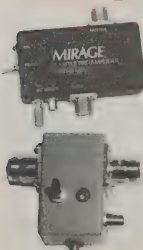
MIRAGE

GaAsFET Preamps for 10, 6, 2, 1 $\frac{1}{4}$ m & 70 cm

These High Gain, Ultra Low Noise GaAs FET Preamplifiers improve weak reception by providing from 15-25dB of receive gain with a N.F. of <0.6dB.

In-line design with automatic transmit & receive switching for up to 160W throughput. Choose the in-shack model (KP-1), or mast mount model (KP-2) which provides the additional benefit of reducing feedline loss.

10 different models - See Mirage in the Price List



ZENITH High Pass Filter

Install at TV set and attach antenna lead. Eliminates interference coming from 6 to 160M transmitters. >45dB attenuation @ 52MHz & lower. For 75 Ω systems, type-F connectors. $2'' \times 1\frac{1}{2}'' \times 1''$. A-8477 **\$9⁹⁵**

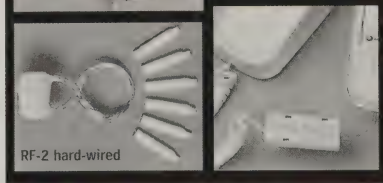


K-COM Telephone RF Interference Filters

Stops telephone RFI caused by 3 to 30MHz transmitters! ...

RF-1/Single line

RF-2 hard-wired



Cure telephone RF interference in the most irritating cases even when dealing with transmitters with full legal power output. Use any number of filters with no adverse effect on telephone performance. Fully assembled, with complete installation instructions.

RF-1 For single line equipment including wired and cordless telephones, answering and fax machines, modems, etc. Standard modular connectors... **\$16⁹⁵**

RF-1/2-line The correct filter for two-line telephone sets, and multi-line multi-station electronic key phone systems in business environments... **\$22⁹⁵**

RF-1/coiled For use when RFI enters through the coiled telephone cord between base & handset **\$22⁹⁵**

RF-2 Hard-wired, provides a wide range of installation options to add RFI rejection at a variety of physical and electrical locations in the system wiring. Inside phone jacks, behind wall mounted telephones, security systems, etc. ... **\$10⁹⁵**

UNIFIED MICROSYSTEMS

W9XT Contest Card for IBM® & PC Compatible

A non-volatile $5'' \times 4\frac{1}{2}''$ card that plugs into a single 8-bit PC slot and provides voice recording, playback and CW keying. Stores 16 seconds of high quality and natural

sounding voice audio sampled at 8 kHz, which can be partitioned between four messages of different lengths. Does not use any disk space. On CW, the card frees up the PC port, and a relay allows operation with positive or negative-keying. Works with all rigs and is compatible with most popular logging programs ... **\$149⁹⁵**

Contest Card Cable Semi-kit Comes wired & tested except for connectors to microphone & transmitter. Includes 6 ft. shielded cable, CW keying line and record switch. Specify: 4 or 8-pin connector... **\$44⁹⁵**



Get on the AES® Internet Mailing List for New & Used Equipment Closeouts • Specials • More!
e-mail to: help@aesham.com and ask to be added to the list.



Q-View QSL Card Holders

Proudly display your favorite QSL cards in these $12'' \times 40''$ clear plastic hang-up holders. Each holds (20) $3\frac{1}{2}'' \times 5\frac{1}{2}''$ cards. Packets open at center to receive cards easily

Package of 3 (frames & displays 60 cards) - **\$12⁹⁵**



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AES has the finest stock of Used Gear anywhere, and we are always looking for Clean, Late Model SSB & FM Gear to take in trade.

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ANTENNA TUNERS



MFJ-945E Mobile Tuner (top) Covers 1.8 to 30 MHz, and rated at 300W PEP. Matches coaxial cable only. Extends mobile antenna bandwidth and eliminates having to stop and adjust the whip length when making frequency changes. Lighted Cross-Needle SWR bridge & Power meter with 50/300 and 5/30W ranges. 8" w x 2" h x 6" d..... **\$89⁹⁵**

MFJ-941E Versa Tuner II Covers 1.8 to 30 MHz and rated at 300W PEP. Matches everything! - coaxial fed dipoles, vees, whips, verticals, beams, random wires and balanced lines, has a built-in 4:1 balun. Lighted Cross-Needle SWR/Power meter with 300/50W and 30/5W ranges. Convenient 8-position antenna selector for 2 coax lines, random wire or balanced line or an external dummy load. 10 1/2" w x 2 1/2" h x 7" d..... **\$99⁹⁵**

MFJ-934 Antenna Tuner/Artificial Ground Makes a random wire an effective antenna. Combines the best features of the MFJ's 941E and 931 into one unit. A full-featured 1.8 to 30MHz, 300W antenna tuner with Cross-Needle meter and Ground Matching knob that lets you switch in inductance to bring an attached random length wire to a low impedance current point, forming an artificial ground. 10 1/2" w x 3 1/2" h x 7" d..... **\$159⁹⁵**

MFJ-948 Has all the features of the 941E but without the dummy load. Has a larger lighted peak reading Cross-Needle SWR/Power meter **\$119⁹⁵**

MFJ-949E Deluxe Versa Tuner II The same power, tuning and switching capability as the 941E. Has a larger, lighted peak or average reading Cross-Needle SWR/Wattmeter. PreTune™ feature allows off-the-air tune-up into built-in a 50 ohm dummy load. 10 1/2" w x 2 1/2" h x 7" d..... **\$139⁹⁵**

MFJ-969 Deluxe Versa Tuner II Covers 6 thru 160 meters and rated at 300W. Features a roller inductor coil with a spinner knob and 3-digit turns counter. Lighted peak or average reading Cross-Needle SWR/Wattmeter with 30/300W ranges. Tunes coaxial cable, random wire or balanced feed-line, has a built-in 4:1 balun. QRM-Free Pre-Tune™ feature allows off-the-air tune-up into a built-in 50 ohm 300W dummy load. Convenient 8-position antenna selector. 10 1/2" w x 3 1/2" h x 9" d..... **\$179⁹⁵**

MFJ-962D Versa Tuner III Covers 1.8 to 30 MHz and rated at 1.5KW PEP. Matches coaxial fed antennas, random wire or balanced line, has a built-in 4:1 balun. Lighted peak or average Cross-Needle SWR/Wattmeter with 200/2000W ranges. Six position selector for 2 coax lines (direct or thru tuner), random & balanced lines. 10 1/2" w x 3 1/2" h x 15" d..... **\$229⁹⁵**

MFJ-986 Differential-T Tuner™ Covers 1.8 to 30 MHz and rated at 3KW PEP. Uses a broadband T-network with roller inductor & differential capacitor. Tunes most antennas using only two knobs. Lighted peak or average reading Cross-Needle SWR/Wattmeter with 200/50W & 2000/500W ranges. Inductor spinner knob, 3-digit turns counter, 6-pos. antenna selector, external dummy load switch, 4:1 balun. 10 1/2" w x 4 1/2" h x 15" d..... **\$269⁹⁵**

MFJ-989C Versa Tuner V Covers 1.8 to 30 MHz and rated at 3KW PEP. Super duty Components. Matches nearly every type of antenna. Roller inductor with spinner knob and 3-digit turns counter. Lighted peak or average reading Cross-Needle SWR/Wattmeter with 200/2000W ranges. Built-in 50Ω 300W dummy load, 3KW 4:1 balun, six-position antenna selector and convenient flip-stand. 10 1/2" w x 4 1/2" h x 15" d..... **\$299⁹⁵**

COAXIAL SWITCHES

MFJ-1702C Antenna Switch Two positions plus center ground, 50Ω. Rated to 500MHz with <0.2dB loss, 2.5KW PEP or 1 KW CW. >60dB isolation @ 300 MHz or >50 dB @ 450 MHz. The unused terminal automatically grounds for lightning protection **\$21⁹⁵**

MFJ-1702CN Lowest loss on UHF. Uses Type N connectors which are good up to 1.1 GHz..... **\$31⁹⁵**

MFJ-1704 Antenna Switch Four positions, plus center ground, 50Ω, rated to 500MHz with <0.2dB loss. Handles 2.5KW PEP, 1KW CW, >50dB isolation @ 500MHz. Includes a replaceable lightning protection device..... **\$59⁹⁵**

MFJ-1704N with Type N's..... **\$69⁹⁵**

MFJ-1701 Antenna Switch Six positions, for 50 to 75Ω systems. Rated for 2KW PEP or 1KW CW from 1.8-30MHz. Unused positions are grounded for lightning protection. 10" w x 3" h x 1 1/2" d..... **\$39⁹⁵**

MFJ 1700B Antenna & Transceiver Switch Select from 1 to 6 antennas & 1 to 6 rigs in any combination - tuner, SWR meter, linear, etc. Can be left in line to operate with any combination. 50 or 75 ohms. Handles 2KW PEP or 1KW CW from 1.8 to 30MHz. Unused positions are automatically grounded for lightning protection. 10" w x 3" h x 1 1/2" d..... **\$69⁹⁵**

DUMMY LOADS

OIL FILLED

MFJ-250 Versaload A 50Ω oil-filled dummy load that provides low VSWR to 400 MHz. Rated at 1 KW CW or 2KW PEP for 10-minutes, with 50% power rating for 20-minutes and 200W CW-400W PEP continuous. 7 1/2" h x 6 1/2" diameter..... With oil **\$49⁹⁵**

MFJ-250X same, but no oil..... **\$29⁹⁵**

DRY LOADS

An air cooled, non-inductive 50Ω resistor mounted in a perforated metal housing. Full rated load for 30-seconds with a de-rating curve up to 5-minutes.

MFJ-260C (HF & VHF) Rated at 300W. 1:1 SWR up to 30MHz, then 1.5:1 up to 650 MHz. 2 1/2" w x 2 1/2" h x 7" d..... **\$29⁹⁵**

MFJ-260CN With type "N" connectors..... **\$34⁹⁵**

MFJ-264 (UHF) Performs from 1.3 to 650MHz, usable to 750MHz. Rated at 1.5KW for 10-seconds and 100W for 10-minutes. 3" w x 3" h x 9" d..... **\$59⁹⁵**

TVI FILTERS



MFJ-704 50Ω Low Pass Filter (right) Installs between HF transmitter and antenna. Reduces the possibility of TVI from harmonics, that fall in the TV band. Full legal power from 1.8 to 30MHz, 3" w x 3" h x 9" d..... **\$39⁹⁵**

MFJ-711 75Ω High Pass Filter (left) Installs at TV or VCR antenna input. Reduces or eliminates interference from HF transmitters operating below 30MHz. ... **\$19⁹⁵**

MFJ-931

Artificial Ground

Eliminates the problems caused by an inadequate ground system when using wire antennas. Resonates a random length wire to act as a tuned counterpoise. Improves efficiency and pattern. Covers 1.8 to 30MHz, RF ammeter tuning. 7 1/2" w x 3 1/2" h x 7" d. Not for antennas fed with coaxial cable. **\$79⁹⁵**



MFJ-701 RFI Free Choke Kit Eliminate common RFI problems by simply winding the offending cable around the RFI suppressing toroid. Includes four ferrite toroids that are effective from .5 to 200 MHz. Each toroid separates into halves to make it easy to wind on all kinds of cable; including computer ribbon, TV coax, power cord, telephone wire, audio & video cables. The halves mount in a snap-together plastic frame. For severe RFI problems and for to larger cables, individual toroids stack together. **\$14⁹⁵**



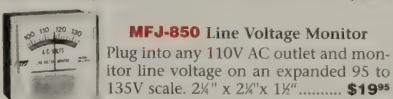
MFJ-1118 Deluxe Multiple DC Outlet Connects to a DC source and provides convenient power distribution in the ham shack. Two pairs of heavy-duty 30A 5-way binding posts for transceivers or other high current devices. Individually fused & RF bypassed, handle 35A total. Six pairs of RF bypassed 5-way binding posts for accessories. Handles 15A total, protected by a master fuse. ON/OFF power switch, LED power indicator, 0-25V DC voltmeter. Posts are spaced for a standard dual banana jack. Comes with 6 ft. of 8 ga. cable with terminals. 12 1/2" w x 2 1/2" h x 2 1/2" d..... **\$69⁹⁵**

MFJ-1116 Similar to MFJ-1118 but without 30A posts. Provides eight RF bypassed 5-way binding posts. Voltmeter, ON/OFF switch & fuse. **\$44⁹⁵**

MFJ-1112 Similar to MFJ-1116 but with five posts, no voltmeter or ON/OFF switch..... **\$29⁹⁵**

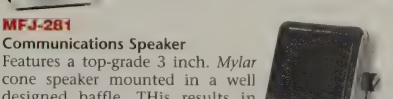
MFJ-270 Lightning Surge Protector

Safeguards your ham gear from damage due to dangerous static charges & lightning induced surges. Replaceable ultra-fast gas discharge tube safely shunts up to 5000 amps of peak impulse current to an independent ground. Rated to 400W PEP, usable to 1000MHz..... **\$29⁹⁵**



MFJ-850 Line Voltage Monitor

Plug into any 110V AC outlet and monitor line voltage on an expanded 95 to 135V scale. 2 1/2" x 2 1/2" x 1 1/2"..... **\$19⁹⁵**



MFJ-281 Communications Speaker

Features a top-grade 3 inch. Mylar cone speaker mounted in a well designed baffle. This results in improved speech intelligibility in the 600 to 4000Hz frequency range while reducing undesirable noise, static and hum.. Nominal 8Ω, handles 8 watts. Swivel mounting bracket, 6 ft. cord with 3.5mm plug. 3 3/4" x 3" x 2 1/2"..... **\$9⁹⁵**



MFJ-624D Deluxe Hybrid Phone Patch jumper selectable for Kenwood, Icom, Yaesu and Alinco rigs with 8-pin mic plug, but works with virtually any rig Nig 12VDC, 9V battery or 110VAC with MFJ-1312B AC adapter. 8" x 2" h x 6"..... **\$99⁹⁵**

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MFJ HF/HF SWR ANALYZER™ with resistance meter

The MFJ-259 is the world's most popular HF/VHF SWR Analyzer! Instantly read your antenna SWR and RF resistance from 1.8 to 170 MHz. Diagnose a wide range of antenna problems.

You get four instruments in one -- 10-digit LCD frequency counter, RF signal generator, SWR Analyzer™ and RF Resistance Meter™.

Measure antenna resonant frequencies and 2:1 SWR bandwidths. Adjust mobile antennas, antenna tuners and matching networks in seconds. Tune critical HF mobile antennas in seconds -- without subjecting your transceiver to high SWR. Adjust your tuner for a perfect 1:1 match! More!

MFJ-259
\$219⁹⁵



MFJ pocket size Morse Code Tutor with LCD display

Learn Morse code fast any where, any time with this tiny MFJ Pocket Morse Code Tutor™! MFJ-418 gives you a large LCD display that reads out letters, numbers, punctuation in plain English. See code as it's sent!

MFJ's proven beginner course takes you from zero code speed to solid copy fast. QST rate MFJ tutors "the clear choice for beginners". Follows ARRL/VEC format. Change speed 3-60 wpm. Practice copying realistic plain English QSOs, random words, letters, prosigns, FCC exam and much more! You'll never run out of practice!

MFJ-418
\$79⁹⁵



MFJ super Tunable DSP Filter has "brick wall" filters

MFJ tunable super DSP "brick wall" filters knock out interference and noise by up to 57 dB. Automatic notch eliminates heterodynes. Adaptive noise reduction. Works with all voice, CW, data signals. Plugs between radio and speaker/phones.

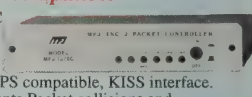
MFJ-784B
\$229⁹⁵



MFJ VHF/HF Packet TNCs are GPS compatible

MFJ-1270C is the world's most reliable packet TNC -- many work 24 hours a day without failure! Fully TAPR TNC-2 compatible, VHF and HF operation, free AC power supply. Enhanced mailbox with auto/reverse mail. GPS compatible, KISS interface. You get MFJ's Anti-Collision™ technology that prevents Packet collisions and improves performance on busy channels. If you want a TNC that'll work 24 hours a day without failure, get the ultra reliable MFJ-1270C!!!

MFJ-1270C
\$109⁹⁵



MFJ-949E Deluxe 300 Watt Tuner



More hams use MFJ-949s than any other antenna tuner in the world! Match nearly any antenna. Has lighted peak and average reading Cross-Needle SWR/Wattmeter, full size dummy load, 8 position antenna switch, 4:1 balun, heavy duty inductor switch. Covers 1.8 to 30 MHz. Handles 300 watts PEP SSB. Scratch-proof cabinet.

MFJ-989C 3KW Roller Inductor Antenna Tuner has AirCore™ Roller Inductor

MFJ-989C
\$299⁹⁵



The rugged MFJ-989C handles 3 KW PEP SSB and covers 1.8 to 30 MHz including all MARS and WARC bands. MFJ's new AirCore™ Roller Inductor, three-digit turns counter and spinner knob gives you exact inductance control for absolute minimum SWR. Has massive transmitting capacitors, super antenna switch, 3 KW current balun, built-in dummy load, Cross-Needle Meter and More!

MFJ Deluxe headset microphone



MFJ-288 K/I
\$24⁹⁵

MFJ's cool new headset with boom mic lets you QSO in private and frees your hands for more important duties. Crystal clear close-talk boom mic with foam wind shield minimizes noise pickup. The mic can pick up your voice whether booming or at a quiet whisper. Comfort pad earphone gives superb tonal quality -- stations come in loud and clear. Made of sturdy black plastic and strong metal sliders. Tiny PTT switch clips to shirt. 6 foot cord. MFJ-288 fits ICOM and compatibles. MFJ-288K is for Kenwood.



MFJ ENTERPRISES, INC.

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Your MFJ product comes with MFJ's famous No Matter What™ one year limited warranty. MFJ will repair or replace your MFJ product (at our option) no matter what for a full year.

MFJ-1026 wipes out interference with 60 dB null



MFJ-1026
\$149⁹⁵

MFJ-1025
\$129⁹⁵

Less antenna.

MFJ-1026 turns your antenna into a directional receiving phased array ... A 60 dB null wipes out interference and noise ... Works on all modes including SSB, AM, CW and FM ... Eliminate unwanted signals ... Expose hidden stations.

You can place a null up to 60 dB deep on any type of noise and interference arriving from any single direction and wave angle. The MFJ-1026 can wipe out interference and noise before it gets into your receiver! Works on all frequencies from 1.5 to 30 MHz including all MF and HF amateur bands and shortwave broadcast.

Wipe out ... lightning crashes from distant thunderstorms, severe power line noise from arcing transformers and insulators, lamp dimmers, touch controlled lamps, electric drills, motors, industrial processes, TV hiddens ... much more! Expose hidden stations. Dig out a weak station buried under a powerful one on the same frequency. Null out your local AM broadcast station. Underneath, you might find an exotic, distant station on an island you've never even heard of.

Connects between transmitting antenna and transceiver. To null, adjust amplitude and phase controls for minimum S-meter reading or lowest noise. To peak, push reverse button. Use built-in active antenna or an external one. Has near constant amplitude phase control.

300 Watt Roller Inductor Tuner



New MFJ-969 has MFJ's superb AirCore™ Roller Inductor and continuous 6 Meter thru 160 Meters coverage! All the features of the popular MFJ-949E: QRM-Free PreTune™, 8 position antenna switch, full size dummy load, lighted Cross-Needle Meter, 4:1 balun and much more!

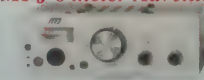
24/12 Hour Temperature Clock

MFJ-152 A single glance gives accurate indoor and outdoor temperatures (Fahrenheit or Celsius) and 24/12 hour time on huge 1 1/2 x 2 1/2 inch backlit LCD. Great for QSOs! Perfect for mobilizing. Gives minimum/maximum temperature readings for selected period. Long-life batteries included. 9 1/2 foot outdoor sensor.

Yaesu mini speaker mic

MFJ-295Y MFJ-295Y mini speaker mic is the perfect companion to those popular FT-10R, FT-40R, FT-50R and VX-1R transceivers. Electret mic gives excellent audio. Speaker produces loud 83 dB of clear audio. Earphone jack, PTT switch, 8 position swivel lapel clip, 3/2 foot cord.

MFJ 6 meter Adventure radio



MFJ-9406X
\$239⁹⁵

Turn it on. Distant stations roll in loud and clear, thanks to the MFJ-9406 quiet crystal-minimized single conversion receiver. Pick up the mic and transmit. MFJ's Constant-Current™ speech processing raises 10 Watts PEP to new heights -- delivering the punch of a much more powerful radio. Explore exotic 50 MHz band openings -- Tropo, Sporadic E, F2, E, Aurora, Meteor Scatter, and more. Ragchew with locals, hunt down new grid squares from far-away places. From home, car, or mountain top, this radio is built to perform! Full CW/SSB coverage.

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Solving your Antenna & Lightning Problems!

Limited Space High Performance Antennas

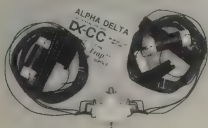
Unlike the usual trap antenna, there are no capacitors to break down under high RF voltages. "ISO-RES" inductors & 12 ga. insulated solid copper wire tolerate full-legal power. 50Ω direct coax feed; tuner usually not required when operating in resonant bands, but may be used for multi-band.



DX-A 160-80-40 Meter 1/4-wave Twin Sloper A top low frequency DX antenna. Combines the tremendous DX firepower of the 1/4-wave sloper with the wide bandwidth of the 1/2-wave dipole. One leg is 67 ft., the other 55 ft. Installs like an Inverted-V with ground return accomplished thru tower or down-lead...**\$59⁹⁵**

DX-B 1/4-wave DX Sloper A single wire with high performance on 160, 80, 40 & 30 meters. Designed for limited space installations where room doesn't allow for the DX-A twin sloper. Requires only 60 ft. overall and provides amazing DX performance at installation heights of only 35 ft., and with the low end at only 8 ft. Pre-assembled & Pre-tuned. - just put it up and start enjoying low band operation. Utilizes stainless-steel hardware, 12 gauge solid copper wire and efficient Alpha Delta "Iso-Res" RF choke coils. To gain the same broadband performance like the DX-A, the DX-B is also designed to be used with a wide range antenna tuner, so no trimming or tweaking is necessary. 50Ω coax feed, rated for full legal power...**\$69⁹⁵**

DX-SWL SWL Broadcast Sloper Covers the 13, 16, 19, 21, 25, 31, 41, 49, 60, 90, and 120M short-wave bands plus the AM broadcast band. Sloper design provides outstanding reception of low-angle DX signals. Multi-band 2KW transmit capability with an appropriate antenna tuner. Overall length is 60 ft...**\$79⁹⁵**



Dipoles use the DELTA-C Hardware Kit

DX-CC "No-Trap" 80-40-20-15-10 meter dipole or inverted-V. Overall length is 82 ft...**\$119⁹⁵**

DX-DD "No-Trap" 80 and 40 meter dipole or inverted-V. Overall length is 82 ft...**\$89⁹⁵**

DX-EE "No-Trap" 40-20-15-10 meter dipole or inverted-V. Also covers 30-17 & 12 meters with an antenna tuner. Overall length is 40 ft...**\$99⁹⁵**

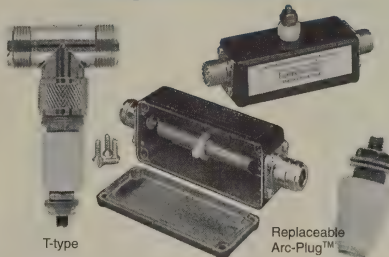
DX-Series Monoband Dipoles Full-size dipoles utilizing the Delta-C Center Insulator with built-in Arc-Plug® Surge Suppressor. Fully assembled using 12 ga. insulated high-strength solid copper wire, CIN end insulators & 50 ft. nylon support rope. Feed with coaxial cable or open-line, rated for legal power.

DX-80 For 3.5MHz (75-80M band), 133 ft. long...**\$49⁹⁵**

DX-40 For 7 MHz (40M band), 66 ft. long...**\$39⁹⁵**

DX-20 For 14 MHz (20M band), 33ft. long...**\$39⁹⁵**

Transi-Trap® Surge Protectors



Alpha Delta Transi-Trap Surge Protectors are gas surge arresters which will protect your valuable ham equipment much more effectively than the lower cost air-gap types. UL listed.

The heart of the unit is the Arc-Plug™, which consists of two electrodes hermetically sealed in a gas filled ceramic cylinder. It acts like a voltage dependent switch that can repeatedly carry large currents for brief periods of time. When a voltage surge occurs on your transmission line, an arc forms between the electrodes allowing it to conduct harmlessly to an independent ground connection, reducing feedline voltage to less than 30 volts. That's protection!

Transi-Traps are the choice of the U.S. Military, and government agencies, worldwide. Transi-Traps are designed for 50Ω coaxial cable and are available with standard SO-239 connectors or N-type connectors which extend operation through 1 GHz.

- Model RT** Rated at 200W thru 500 MHz... **\$36⁹⁵**
- Model RT/N** Rated at 200W thru 1GHz... **43⁹⁵**
- Model HV** Rated at 2KW thru 500 MHz... **39⁹⁵**
- Model HV/N** Rated at 2KW thru 1GHz... **46⁹⁵**
- Model LT** "T"-type, 200W thru 30 MHz... **29⁹⁵**



DX-LB Low Band Dipole Covers 160-80-40 meters with an overall length of only 100 ft. Antenna performance and 2:1 VSWR bandwidth is site dependent and varies with height above ground and surrounding objects. The typical bandwidth is:

160M - 20kHz • 80M - 40 kHz • 40M - 300 kHz
Full band coverage can be accomplished with an antenna tuner. Built with insulated 12ga. wire, stainless steel hardware and uses the Model DELTA-C static protected center insulator and CIN end insulators. Use coax or open wire line and configure as a dipole or inverted-V. Assembled and ready to go!...**\$119⁹⁵**



DX-ULTRA Shortwave Dipole Antenna Covers AM Broadcast through 30MHz. Provides efficient, low-noise, broadband performance for Medium Wave, Tropical, International SW, Military, Government, Embassy, Maritime, Aircraft, Commercial and Utility frequencies. ISO-RES inductors, parallel wire elements and the exclusive DELTA-C Center Insulator with the built-in ARC-PLUG® Static Electricity Protector. Over all length is 80 ft.; may be installed as a dipole, inverted-vee, or full sloper. It can be used with an antenna tuner as a transmit antenna up to 2kW. Connectors will accept either coaxial cable or balanced line. Fully assembled, ready to go!...**\$119⁹⁵**

Lightning Surge Protected 2 & 4 Position Coax Switches



Alpha Delta Coaxial Antenna Switches are made only in the U.S.A. The extremely high quality custom design features a cast housing with a constant impedance micro-strip cavity for outstanding performance through UHF. No lossy wafer switches are used, and a solid positive detent roller bearing switch drive leaves no-doubt to which position is selected. The unused antenna circuits are automatically grounded to reduce antenna interaction, noise and the effects of lightning. For the antenna circuit that is in use, the famous replaceable Alpha Delta Arc-Plug™ Cartridge provides continuous protection. Antenna switched in or out, you're well protected both ways! The Arc Plug is easily accessed through front panel so you may permanently mount the switch to any surface. Both the two and four position models handle full legal power.

DELTA-2 2-position coaxial switch with SO-239 connectors, rated for up to 500MHz... **\$49⁹⁵**

DELTA-2/N 2-position coaxial switch with N-type connectors, rated for up to 1.3 GHz... **\$64⁹⁵**

DELTA-4 4-position coaxial switch with SO-239 connectors, rated for up to 500MHz... **\$79⁹⁵**

DELTA-4/N 4-position coaxial switch with N-type connectors, rated for up to 1.3 GHz... **\$89⁹⁵**

Antenna Hardware Kit



Don't assemble your next dipole antenna without one of these CENTER and END insulator combos. They're designed for strength, and to provide equipment protection with a built-in replaceable SEP Arc-Plug® Static Electricity Protector. Ideal for dipoles, Vees, zepps and all kinds of SWL receive antennas. Feeds with either coax or balanced line. Rated for full legal power.

The SEP Arc-Plug protector which is mounted in the DELTA-C center insulator "bleeds off" slow rising static electricity charges routing them harmlessly to ground, before they can enter the shack thru the feedline. This is far more effective than DC grounded baluns or chokes, which can be "popped" by static charges. Dangerous static charges are developed from thunderstorms, high wind driven snow or desert sand, and have been measured to 1,000's of volts; so potent, they can puncture the dielectric of unterminated coax.

The DELTA-C Center Insulator and DELTA-CIN end-insulators are fabricated with an extremely rugged UV and RF resistant DELTALLOY material that is so tough, you can drop it off a roof without damage. Don't rely on fragile ceramic or glass insulators! Only stainless steel hardware used in the center insulator for salt air and other corrosive environments, and all internal connections are hard soldered.

DELTA-C Antenna hardware kit Contains DELTA-C Center insulator, (2) end-insulators and a SEP ARC-PLUG Protector... **\$29⁹⁵**

DELTA-CIN End-insulators (separate) ea. **\$1⁹⁵**

OUTbacker

HF Mobile Antennas

Performance plus Convenience...

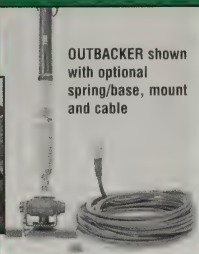
Including HF + 6&2M



Whether mobile...



or backpack portable!



OUTBACKER shown with optional spring/base, mount and cable



- HAM - MARS - CAP - MARINE/ITU • LOW SWR
- WIDE BANDWIDTH • NO CHANGING COILS

It's plug-n-play!

The Outbacker™ - Constructed of fiberglass with pretuned copper helical windings and covered with smooth epoxy-resin and a coating of polyurethane for strength, and durability. The mounting ferrule is nickel-plated brass with standard 3/8x24 threads.

Frequency coverage is broadbanded but the top spike is adjustable which allows tuning for the lowest possible VSWR on 75M and the upper end of 10M.

Tap points are clearly engraved for each band. Changing bands is accomplished manually by plugging the unique OUTBACKER "Wander lead" into the proper tap; for 75M the lead is removed entirely. Beautiful, shiny black finish. 8 models, with optional spring/base, mounts and cable.

OUTBACKER PERTH
OUTBACKER PERTH PLUS
OUTBACKER 8
OUTBACKER HP
OUTBACKER SPLIT
OUTBACKER TRI-SPLIT
OUTBACKER MARINER
OUTBACKER STEALTH PLUS
OUTBACKER Spring/Base
OUTBACKER OB-360
DIAMOND K-4003/8C
DIAMOND C-110

Description

75-10M + WARC's, 150W P.E.P • 7.5 ft. tall • 3.5 ft. stinger retracts into the 4 ft. mast for garaging
 75-10M + 6 & 2M • 6 ft. tall • Perfect for HF + VHF radios: IC-706, DJ-70T, etc.
 75-10M, 300W P.E.P • 6 ft. tall
 75-10M • HIGH POWER - 500W P.E.P • 6 ft. tall
 75-10M, 300 W P.E.P • 6 ft. tall • Breaks down into 2-3 ft. sections for easy transport, pouch included.
 Same as OUTBACKER SPLIT except breaks down into 3-2 ft. sections, storage pouch included
 Covers ITU Marine: 2.182, 4.1, 6.2, 8.2, 12.4, 16.5, & 22.1MHz and Ham bands: 75, 40, 20, 17 & 10M
 75-10M + 6 & 2M • Only 4 ft. tall, 150W PEP • Perfect for use with HF+ VHF radios: IC-706, DX-70T, etc.
 HEAVY DUTY • Nickel/zinc plated • 3/8-24 threads • SO-239 connector • Requires 1/2" hole for mounting
 Trunk lip mount with spring for Perth/STPlus/Perth Plus
 Diamond 3/8" x 24 thread trunk-lip mount with 6 ft. coaxial cable for all OUTBACKER models
 Diamond 10 ft. extension cable for K-400/3/8C trunk-lip mount

AES Model #	Price
Perth	\$289 ⁹⁵
Perth Plus	\$299 ⁹⁵
OB-8	\$279 ⁹⁵
OB-8HP	\$299 ⁹⁵
OB-S8	\$299 ⁹⁵
OB-8TRI	\$329 ⁹⁵
OB-M	\$429 ⁹⁵
Stealth-PLUS	\$269 ⁹⁵
OB-SB	\$99 ⁹⁵
OB-360	\$99 ⁹⁵
DIAK400-3/C	\$69 ⁹⁵
DIAC-110	\$14 ⁹⁵

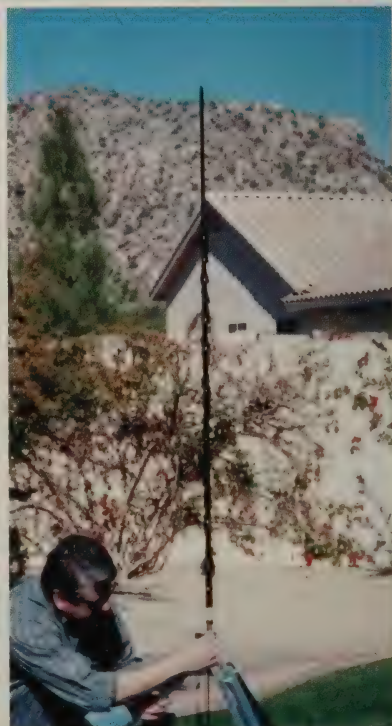
The Outreach™ Antenna - \$399⁹⁵

An efficient Portable antenna system - nearly unseen by your neighbors and covering ALL the bands from 160 thru 10 meters, providing an exceptional level of performance that will change forever the way you think about compact antennas. The perfect companion for the Outpost Tripod mount. A complete system in the Outbacker tradition to meet the needs of those requiring space limited, deed restricted, backyard, patio, woods or field day.

- All Bands - 160 thru 10 meters -
- Only 12 feet tall! • Weight - 4 lbs.
- Exceptional performance - 10, 12, and 15 meters are 5/8 wave - all bands are center loaded for peak performance. Compare to any whip you have ever used - you'll be amazed!
- Handles 150 watts P.E.P.
- Split 8 ft. shaft and 4 ft. stinger - antenna breaks down to a 4 ft. length for easy portability.
- Terminates in standard 3/8 x 24 base.
- Utilizes the time proven OUTBACKER® band tap system.

The Outreach 500™ Antenna - \$439⁹⁵

The mechanical specifications are exactly the same as for the standard Outreach model, however it does not cover 160 meters, but 6 meters in addition to all other HF bands including WARC bands. A band tap is provided for 80 & 75 meters, allowing coverage of the entire 3.5-4.0 MHz range. Power handling has been increased to 500W CW & 600W P.E.P.





Variable Response Console

An advanced audio processing speaker system that offers studio level audio quality for music, voice, and CW/data for the communications enthusiast. It enhances the reception capabilities of ANY receiver, transceiver or scanner—even the expensive ones using DSP! An exclusive custom designed ducted port bass reflex speaker system offers outstanding audio performance.

- Low distortion, low harmonic push-pull audio amplifier. Outperforms the typical single-ended amplifier.
- Adjustable 12dB Bass boost and cut circuitry enhances both Voice and Music. LED reads out in dB
- Adjustable sharp cut-off "Sampled Data Switched Capacitor Audio Filter" (SCAF) can be set for optimum interference reduction for any mode and any band condition – AM, FM, SSB, CW or data. LED light bar readout shows cut-off frequency.
- Peaking circuitry (20 dB) allows CW and Data signals to "pop" out of the background noise & interference.
- Continuously adjustable 40dB Deep Notch circuitry effectively takes out interfering heterodynes.

Model VRC Variable Response Console\$249⁹⁵

Model VRC-2 Ducted Port Bass Reflex Speaker same as above, but no amplifier/filter ... \$99⁹⁵



KENT Paddles

from Alpha Delta

Reasons for Buying KENT Paddles:

- Delicate, smooth feel due to sealed ball bearings instead of simple spring-loaded pivots • Free movement, minimum friction sideplay
- Precise gap alignments with instrument knurled heads on fine pitched screws and locking nuts.
- Rugged components made from machined, polished solid brass contained within a permanent brass housing.
- Silver contacts • Non-slip feet • Weighted for stability • Paddle models use heavy steel bases
- Designed and produced by R.A. Kent Engineers – England. Fully assembled and tested by Alpha Delta.

Model SK-1 Straight Morse Key (top)\$129⁹⁵

Model SP-1 Single Paddle Morse Key (bottom/left) ...\$139⁹⁵

Model TP-1 Twin Paddle Morse Key (bottom/right)....\$149⁹⁵



Jim Burns, WB4ILP demonstrates the versatility of the Outpost™



Alpha Delta Outpost™ – 199⁹⁵

Tripod/Ground Coupler Mounting System

- Designed to match the base impedance of all OUTBACKER® antennas.
- Fold-over top mount, 3/8" x 24 – SO-239. The antenna will be out of view when not in use.
- Constructed of aircraft 6061-T6 aluminum, stainless steel hardware & wing nuts – no tools required.
- No digging – no holes in ground – no concrete.
- Improves antenna efficiency – the fold-out legs act as a large capacitor to provide proper coupling to the ground and proper base impedance to the antenna.
- Fold-up design • Weighs 18 lbs

Alpha Delta DH-1 Hydraulically Dampened Fold-Over Fixture for Vertical Antennas – \$249⁹⁵

- Allows easy installation or working on your vertical antenna from the ground.
- Quick and easy raising and lowering. Great for larger HF Verticals such as the R-7000, DX-77, or others up to 29 ft. long.
- Hydraulic module provides assisted lowering – safe, one man operation.
- Stealthy! When lowered, the attached antenna rests steady in a horizontal position hidden from your neighbor's view.
- Bolts to weighted board as shown, or 16" square by 24" deep concrete base recommended for strong permanent installation – just use sack concrete.
- Stainless steel hardware, no assembly required. Shipping weight 33 lbs.

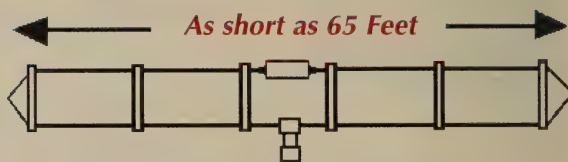




Broadband Folded Dipoles - Continuous Coverage of HF Band

These antennas are so unique that they even have a patent on them! They can offer operation over the entire HF band without need for an antenna tuner. Work *any* frequency you want without going through a lot of knob twirling and measurements to get a good SWR match - *just set your frequency and go!*

See B&W in the Price List



- ✓ *Unique Patented Design*
- ✓ *True Continuous Coverage*
- ✓ *1.8 - 30 Mhz in Only 90 Ft.*
- ✓ *Low Noise*

- SWR less than 2:1 from 1.8 - 30 Mhz
- No antenna tuner required
- 2 KW PEP SSB/CW ICAS
- #14 stranded copperweld or stainless wire
- 50 Ohm input with SO-239
- Comes completely assembled, only 10 lbs.
- Install as flat, inverted Vee, or sloper

This antenna was designed at Barker & Williamson by request of the US Government over 20 years ago. Since then we have supplied tens of thousands of them to the US Armed Forces and other military organizations including Nato, international disaster relief organizations, emergency management operations and countless commercial organizations around the world. They can be found on every continent, including Antarctica. From deserts, to tropical rain forests, to frozen tundra - tough antennas that deserve their excellent reputation for performance worldwide.

AC-5-30 (Copperweld), ACS-5-30 (Stainless Steel) -----5.0 to 30 MHz in 65 feet
BWD-1.8-30 (Copperweld), BWDS-1.8-30 (Stainless Steel) -----1.8 to 30 MHz in 90 feet

Trap Dipole Antennas

Barker & Williamson dipoles are made from #14 stranded copperweld wire. All antennas will handle 1KW PEP. These dipoles may be installed as inverted "Vees" or horizontally.

Length	Bands	Description	Model	Shpg Weight
137 Ft 41.75 M	160 80 40 20	Low SWR on all bands. Three sets of traps isolate a full half wave on each band for superior performance.	AS-160	8 lbs 3.65 Kg
110 Ft 33.5 M	80 40 20 15 10	Low SWR on 80 and 40 meter bands, somewhat higher SWR on 20, 15 and 10 meters. Utilizes one set of traps.	AT-110	5 lbs 2.25 Kg
96 Ft 29.25 M	160 30	2 KW PEP. This antenna has one set of loading coils to allow 160 meters in very limited space.	AXS-160	6 lbs 2.72 Kg
78 Ft 23.75 M	80 40 20	Two sets of traps give low SWR on all bands. Excellent 80 meter coverage.	AS-80	6 lbs 2.72 Kg
65 Ft 19.8 M	80 40 15	A combination of one set of loading coils and one set of traps allows 80 meters in very limited space.	AXS-80	6 lbs 2.72 Kg
55 Ft 16.75 M	40 20 15 10	Four bands in only 55 ft. One set of traps gives efficient operation.	AT-55	5 lbs 2.25 Kg
40 Ft 12.2 M	40 20 15 10	Utilizing three sets of traps, this antenna has low SWR on all bands.	AS-40	7 lbs 3.18 Kg
20 Ft 6.1 M	20 15 10	For very light spots, two sets of traps yield low SWR on all three bands.	AS-20	6 lbs 2.72 Kg



300W PORTABLE ANTENNA FOR 2 TO 40 METERS

AP-10 Designed especially for renters, travelers and city dwellers. Stainless steel whip (51"), insulated counterpoise wire, aluminum bracket/clamp, and 10 ft. of coax. Included set of loading coils for 40, 30, 20 (also used for 18), 15 and 10 meters. No coils needed for 6 or 2 meters. Also useful as an emergency antenna. Don't be off the air! 3 lbs.

HEAVY DUTY COAXIAL SWITCHES FOR 2KW PEP CERAMIC SWITCHES WITH COIN SILVER CONTACTS

CS-6G Single Pole, 6 Position. All unused positions grounded. SO-239 UHF connections. Shipping wt. 2lbs.



CSR-5G Single Pole, 5 Position. All unused positions grounded. Sixth position grounds all inputs for lightning protection. SO-239 UHF connections. Desk, wall, panel mount. Shipping wt. 2lbs.



For more information, please visit our website at www.bwantennas.com

Quality Communications Products Since 1932 — All Products Proudly Made in the USA

Vertically Speaking THE BEST!

... / VERSATILE
... / MULTIBAND
... / VERTICAL
... / ANTENNAS

- HF2V
- HF6V
- HF9V

Offering 2, 6 and 9 Band Verticals with optional 160 Meters. Butternut's unique, patented design solves traditional problems that are associated with vertical antennas. Many verticals rely on lossy traps to offer multiband performance - which causes narrowed bandwidth. The Butternut trap-free design offers superior bandwidth and much greater radiation efficiency.

SPECIFICATIONS

Frequency:

HF2V • 40 & 80M
HF6V • 10, 15, 20, 30, 40 & 80M
HF9V • 6, 10, 12, 15, 17, 20, 30, 40 & 80M
(Opt. 160M kit avail.)

Height: 26 ft. HF6V/HF9V
32 ft. HF2V

VSWR @
Resonance: 1.5:1 or less on all bands



Call or write for our Free New Color Brochure!
(Ask for the designers Dirty Little Secrets!)

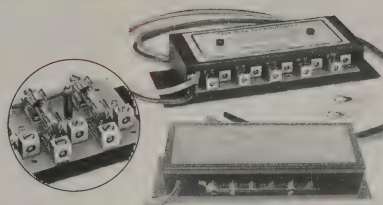
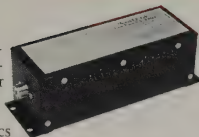
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Oak Bay Technologies

LP-11P Commercial Grade Low Pass Filter

Installs in the transmission line between transmitter and power amplifier or tuner. Eliminates TVI by filtering out transmitter generated harmonics that could fall within the TV bands. Eleven pole Inverse Chebyshev filter design operates from 1.8 thru 30MHz with less than 0.5dB insertion loss, an upper cutoff frequency of 41MHz and 80dB of ultimate attenuation. Maximum power is 1000W **\$69⁹⁵**
LP-50 Low Pass Filter for 1.8 thru 54MHz **\$69⁹⁵**



High Power Current Strips

Make just one connection to your battery or power supply and distribute the power to multiple devices. Perfect for multiple HF/VHF radios or other high current equipment in the ham shack.

PS-101 (top) Heavy-duty construction and high current capability. Provides five outputs with two fused at 20 Amps and three fused at 30 Amps. Rugged screw & clamp connections. Rated for 50A total current. Heavy-duty steel housing. Comes with 5 ft. of #8 gauge hook-up wire, terminal lugs and fuses. **CLOSEOUT \$64⁹⁵**

PS-612M Provides six outputs with circuit breakers. Three rated at 30Amps and three at 20 Amps. Rated for 50 Amps total current. Heavy duty steel housing. Comes with 4 feet of #8 gauge wire and lugs ... **\$64⁹⁵**



AM-101B Rubber Duck Window Mount

Improves handheld performance when operating mobile by getting the RF out of the car. Great for emergencies, rental cars, etc. The stainless steel bracket slips on the top edge of car window, and the rubber duck antenna from your HT attaches to the BNC mount on the outside. Comes with 6 ft. of RG-174U coax with BNC connector. 15W. **\$24⁹⁵**

BS-25 Automatic Battery Saver Module Stops radio equipment from draining your car battery and prevents unauthorized use. Installs between your radio and car battery. It automatically turns on power when you turn the ignition on and removes power 4 to 8 minutes after turning ignition off. Handles up to 25 Amps draw at 14.8V DC. Rugged, plated steel enclosure, 2" x 4" x 1 1/4", fused power lead. **\$39⁹⁵**



NEW WAVE Antenna

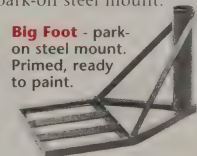
PORTABLE Collapsible Masts

For Portable or Temporary antenna installations!

These are 7-section, telescoping masts manufactured from high-quality, 6063-T832 polished aircraft aluminum with a taper from 2" to 1-1/4". Lightweight, are easily raised by one person at ground level in seconds. Each section joint has a 4" overlap and snaps into place. Conveniently rotates at any section along its length, or securely locks into place. Options: a handy snap-on antenna mount and park-on steel mount.

Adventurer 7' to 12 ft.	\$109⁹⁵	Explorer 9' to 40 ft.	\$199⁹⁵
Traveler 5' to 19 ft.	\$124⁹⁵	Big Foot Park-on mount.	\$119⁹⁵
Rover 7' to 26 ft.	\$149⁹⁵	Snap-on Mount Antenna mount. Attach antennas to Portables without tools.	
Expeditioner 8' to 33 ft.	\$174⁹⁵	Adds 12" to top.	\$19⁹⁵

Big Foot - park-on steel mount. Primed, ready to paint.



BUTTERNUT

HF5B BUTTERFLY BEAM

A N T E N N A

If you hunger for a directional antenna, but can't put up a full-size Yagi...

WE'VE GOT THE ANSWER!

Designed for the amateur with limited space, it offers significant improvement over omnidirectional antennas. Light enough to turn easily with a standard TV antenna rotator, it mounts easily on a mast or roof tripod.



Wingspan: 12 ft. 6 in. (3.8m)
Boom Length: 6 ft. (1.8m)
Turning Radius: 6 ft. 11 in (2.1m)
Vertical Spreaders: 6 ft. (1.8m)
VSWR @ Resonance: 1.5:1 or less on all bands
Frequency: 10, 12, 15, 17 & 20M
Minimum Height: 30 ft (9.1m)

**Featuring the COMET
Exclusive SLC System:**

- Linear Coil for Maximum Gain
- Soldered Element Joints
- ABS Radome Joints: Weather Proof/Invisible to RF for the Finest Radiation Pattern

CYA-240 • Dual-band 146/446MHz Yagi Cable and Divider included • Gain VHF 9.5dBi 3 Elements • UHF 11.6dBi 5 Elements • Max Pwr: 150 FM/300W SSB • Boom Length: 5'3" • Weight: 4lbs. 7ozs. • Conn: SO-239 • Construction: Aluminum

NEW

GP-3 • Dual-band 146/446MHz Base Repeater Antenna
Gain & Wave: 146MHz 4.5dBi 6/8 wave • 446MHz 7.2dBi 5/8 wave x 3 •
Max Pwr: 200W • Length: 5'11" • Weight: 2lbs. 9ozs. •
Conn: Gold-plated SO-239 • Construction: Single-piece fiberglass

GP-6 • Dual-band 146/446MHz Base Repeater Antenna
Gain & Wave: 146MHz 6.5dBi 5/8 wave x 2 • 446MHz 9.0dBi 5/8 wave x 5 •
Max Pwr: 200W • Length: 10'2" • Weight: 3lbs. 8ozs. • Conn: Gold-plated SO-239 •
Construction: Fiberglass, 2 Sections

GP-9/GP-9N • Dual-band 146/446MHz Base Repeater Antenna • BEST SELLER!
Gain & Wave: 146MHz 8.5dBi 5/8 wave x 3 • 446MHz 11.9dBi 5/8 wave x 8 •
Max Pwr: 200W • Length: 17'8" • Weight: 5lbs. 11ozs. • Conn: GP-9 Gold-plated SO-239 • GP-9N Gold-plated N-type female • Construction: Fiberglass, 3 Sections

CX-333 • Tri-band 146/220/446MHz Base Repeater Antenna
Gain & Wave: 146MHz 6.5dBi 5/8 wave x 2 • 220MHz 7.8dBi 5/8 wave x 3 •
446MHz 9.0dBi 5/8 wave x 5 • Max Pwr: 120W • Length: 10'2" • Weight: 3lbs. 1oz. •
Conn: Gold-plated SO-239 • Construction: Fiberglass, 2 Sections

GP-15 • Tri-band 52/146/446MHz Base Repeater Antenna
Gain & Wave: 52MHz 3.0dBi 5/8 wave • 146MHz 6.2dBi 5/8 wave x 2 • 446MHz 8.6dBi 5/8 wave x 4 • Max Pwr: 300W • Length: 7'11" • Weight: 3lbs. 1oz. • Conn: Gold-plated SO-239 • 2MHz band-width after tuning (6M) • Construction: Single-piece fiberglass

COMET has an extensive line of Mono-Band/Dual-Band/Tri-Band Antennas for Base Station and Repeater use.

For a complete catalog of COMET Antenna products call or visit your local dealer. Or, contact NCG Company at 800/962-2611. Use COMET products, and enjoy amateur radio to it's fullest!

COMET

1275 N. Grove Street • Anaheim • California 92806
(714) 630-4541 • (800) 962-2611 • Fax: (714) 630-7024

COMET Specializes in a wide assortment of Mobile Mounting Systems that require **NO HOLES**. A variety of trunk lid, hatch-back, rain gutter, roof rack and window mounts are available along with low loss coax cable assemblies, for the ultimate mobile station!

For a complete catalog of **COMET** Antenna products call or visit your local dealer. Or, contact **COMET Company** at 800/962-2611. Use **COMET** products, and enjoy amateur radio to it's fullest!

- Gold-Plated Connectors
- High-Quality Craftsmanship
- Unique Fold-Over Feature

NEW Z750 • Dual-band 146/446MHz w/fold-over • Includes COMET exclusive theft-resistant lock!
Gain & Wave: 146MHz 2.15dBi 1/2 wave • 446MHz 5.5dBi 5/8 wave x 2 • Length: 39" • Conn: Gold-plated PL-259 • Max Pwr: 200W

NEW Z760 • Dual-band 146/446MHz w/fold-over • Includes COMET exclusive theft-resistant lock!
Gain & Wave: 146MHz 6/8 wave 4.5dBi • 446MHz 5/8 wave x 3 7.2dBi • Length: 62" • Conn: Gold-plated PL-259 • Max Pwr: 150W

NEW SBB-15 • Tri-band 52/146/446MHz w/fold-over
Gain & Wave: 52MHz 0dBi 1/4 wave • 146MHz 4.5dBi 6/8 wave • 446MHz 7.2dBi 5/8 wave x 3 • Length: 58" • Conn: PL-259 • Max Pwr: 120W

NEW SBB-7/SBB-7NNMO • Dual-band 146/446MHz w/fold-over
Gain & Wave: 146MHz 4.5dBi 6/8 wave • 446MHz 7.2dBi 5/8 wave x 3 • Length: 58" • Conn: SBB-7 PL-259/SBB-7NNMO NMO • Max Pwr: 70W

NEW SBB-5/SBB-5NNMO • Dual-band 146/446MHz w/fold-over
Gain & Wave: 146MHz 2.5dBi 1/2 wave • 446MHz 5.5dBi 5/8 wave x 3 • Length: 39" • Conn: SBB-5 PL-259/SBB-5NNMO NMO • Max Pwr: 120W

SBB-224/SBB-224NNMO • Tri-band 146/220/446MHz w/fold-over
Gain & Wave: 146MHz 2.15dBi 1/2 wave • 220MHz 3.5dBi 5/8 wave • 446MHz 6.0dBi 5/8 wave x 2 • Length: 36" • Conn: CX-224 PL-259, CX-224NNMO NMO • Max Pwr: 100W

B-20/B-20NNMO • Dual-band 146/446MHz w/fold-over
Gain & Wave: 146MHz 2.15dBi 1/2 wave • 446MHz 5.0dBi 5/8 wave x 2 • Length: 30" • Conn: B-20 PL-259/B-20NNMO NMO • Max Pwr: 50W

B-10/B-10NNMO • Dual-band 146/446MHz cellular look-a-like • Gain & Wave: 146MHz 0dBi 1/4 wave • 446MHz 2.15dBi 1/2 wave • Length: 12" • Conn: B-10 PL-259/B-10NNMO NMO • Max Pwr: 50W

SMA-3 • 146/446/900MHz HT Antenna • Gain: 146MHz 1.2dBi • 446MHz 1.7dBi • 900MHz 3.4dBi • Length: 9.75" • Conn: Male SMA • Max Pwr: 10W

SMA-503 • 146/446 HT Antenna • Gain and Wave: 146MHz 1/4 wave • 446MHz 5/8 wave • Length: 8.75" • Conn: Male SMA • Max Pwr: 10W

SMA-501 146/446MHz HT Antenna, with an SMA Connector!
Gain & Wave: 0dBi 1/4 wave
Max Power: 10 watts
Length: 1.75" Connector: Male SMA

CH-32 146/446MHz HT Antenna
Gain: 0dBi
Length: 1.75" Conn: BNC

Improve the performance of your FT-50R or VX-1R with these SMA style antennas. Light-weight and flexible, these antennas provide a substantial improvement!



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COMPANY BACKGROUND

Cushcraft Corporation, a world leader in the manufacture and development of communication antennas, has been committed to total customer satisfaction for more than four decades. Cushcraft has become the world leader in antennas for amateur radio and small cell communications applications. Cushcraft has a strong presence in Land Mobile Radio, Two-Way, Trunking, Cellular, Security, RF Data Collection and Transmission, ISM Spread Spectrum, and other applications.

In January of 1995, the company was acquired by its president and a group of industry leaders. This leadership has assembled a strong team of managers whose commitment to satisfying customers continues to drive Cushcraft's expansion. Building on

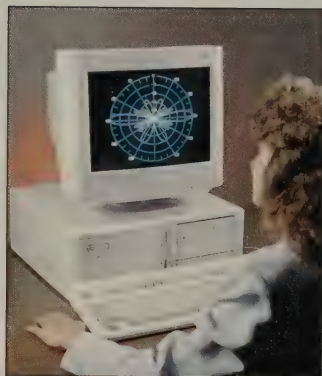
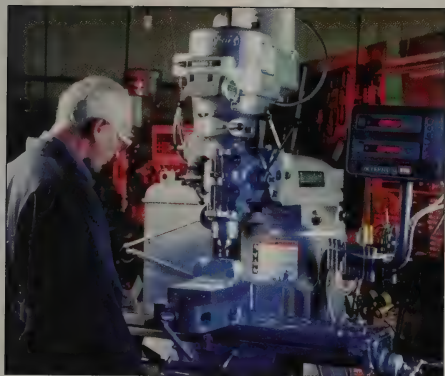
its strengths, Cushcraft has become a leader in the development of antennas for high speed data transmission in the ISM and microwave bands, spread-spectrum, PCS, NII and numerous other wireless markets.

The company is known for its skill in designing and manufacturing antennas in volume and at competitive prices while maintaining the highest quality and on-time delivery. Cushcraft's success in the marketplace has been fueled by its highly skilled, progressive management team and the use of state-of-the-art equipment and techniques.

MANUFACTURING

Cushcraft's manufacturing facility is located in Manchester, NH, USA. The company's offers complete design and prototyping to develop working models to test alternatives. Cushcraft is constantly striving to improve quality and performance to meet customer's needs. The company implements manufacturing strategies and quality techniques to achieve zero defects. Cushcraft is currently using the Dataworks System as a foundation for its ISO9000 program. Manufacturing objectives are met by managing 1,200 different SKU's in the operation of its specialized manufacturing cells. These assembly techniques are proven practice for the manufacture of quality products at a low cost.





ENGINEERING

Cushcraft's engineering department is committed to total customer satisfaction. Engineering's primary responsibility is new product development to support direct customer and general market requirements. Additionally, the engineering department provides general technical and design support to customers on a variety of antenna and system performance issues. One of our unique capabilities is rapid prototype development where, in many cases, an antenna requirement can be implemented into a prototype within 10 working days.

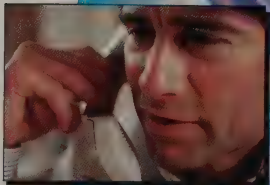
To ensure that we are responsive to customer needs, the engineering department maintains a highly skilled, expert technical

staff who are leaders in antenna design and development. The engineering department also maintains state-of-the-art measurement and test equipment which includes a 40 ft. by 20 ft. by 12 ft. digitally automated anechoic chamber and associated test equipment.



SALES & SERVICE

Cushcraft's Sales and Customer Service Department is fully staffed with well trained sales engineers and customer support personnel. Their primary responsibility is to assist customers with application of former, current and new antenna models. Our objective is to provide personalized service and execute immediate results, yielding complete customer satisfaction. Please call us with any antenna related questions that you may have. We take pride in our ability to provide solutions to your needs.



CUSHCRAFT
COMMUNICATIONS ANTENNAS



CUSHCRAFT
COMMUNICATIONS ANTENNAS

The R7000 is a 10 through 40 meter, no ground radial antenna that is expandable to include 80 meters. It includes the best features of its predecessor the R7 plus many more. R7000 means excellent performance, easy installation and use, slim silhouette and high reliability.

R80 Add-On Kit

80 meters can be easily added to the R7000 with the R80 kit. The kit includes a 40 meter trap, tubing, 80 meter loading coil, UV stable 400 lb. test guy rope and three 20 foot counterpoise wires that attach to your guy points. The R80 counterpoise wires were designed with state-of-the-art anti-resonators to ensure top performance on all bands. The R7000+ with R80 kit is pictured on page 2.

■ **EXPANDABLE TO 80M**

Transform your R7000 into an R7000+ with R80 kit (trap, tubing, guy & counterpoise wire)

■ **RELIABLE**

New trap design is stable in all conditions

■ **EASY INSTALLATION**

For typical use, tuning is not needed

■ **AUTOMATIC BAND CHANGING**

To any band from 10 through 40m (80m with R80 kit)

■ **SLIM SILHOUETTE**

Gain favor of family and neighbors with the slim, smooth profile of our new trap design

MODEL	R7000	R7000+ (w/R80 kit)
Frequency, meters	10,12,15,17, 20,30,40	10,12,15,17 20,30,40,80
Gain, dBi	3	3
VSWR	1.2:1 typical	1.2:1 typical
2:1 bandwidth, KHz	10m (1700) 12m (100) 15m (450) 17m (100) 20m (250) 30m (100) 40m (150)	10m (1700) 12m (100) 15m (450) 17m (100) 20m (250) 30m (100) 40m (100) 80m (70)
Power Rating, Watts	1500	1500
Radiation angle, deg.	16	16
Horizontal rad, deg	360	360
Height, ft(m)	24 (7.3)	34.5 (10.5)
Mast size range, in (cm)	1-3/4 to 2-1/8 (4.4-5.4)	1-3/4 to 2-1/8 (4.4-5.4)
Wind load, ft ² (m ²)	2 (0.2)	2.5 (.23) antenna 1.5 (.139) guys
Weight, lb, (kg)	18 (8.2)	24 (10.8)

10, 12, 15, 17, 20, 30, 40 Meters

R7000



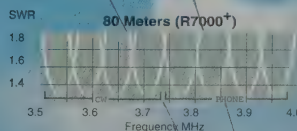
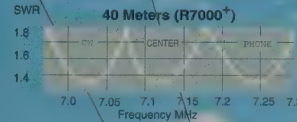
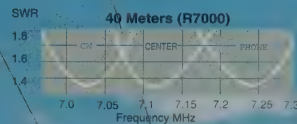
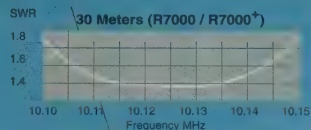
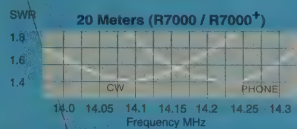
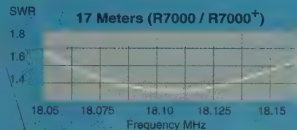
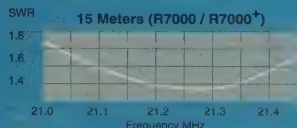
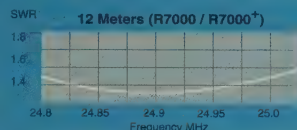
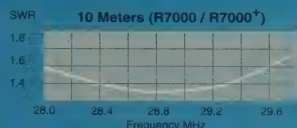
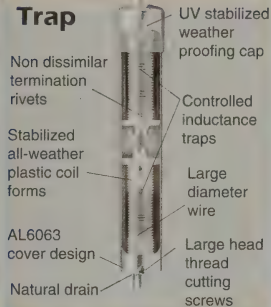
Here's what some of the very first R7000 users have to say.

"The antenna is well built. The instructions are very clear with very helpful diagrams . . . Seven bands right out of the box with no tuning is impressive. . . I really like the construction of this antenna, no loose lockwashers to chase around. All stainless steel hardware is top notch. Keep up the good work." WVØH

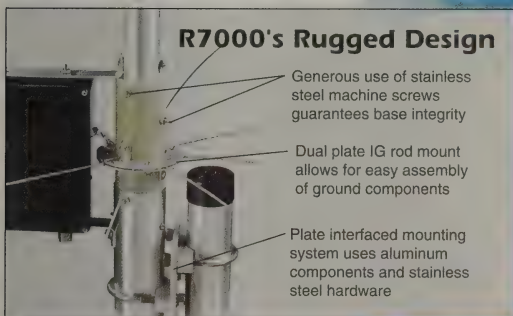
"The R7000 experienced several hours of 50 mph sustained wind with gusts 70 plus mph. I used the R7000 during this time and noticed no difference in performance . . . I was surprised by being able to easily work western European and western African stations on 17m (from North Dakota)" WBØOAJ

10, 12, 15, 17, 20, 30, 40, 80 Meters

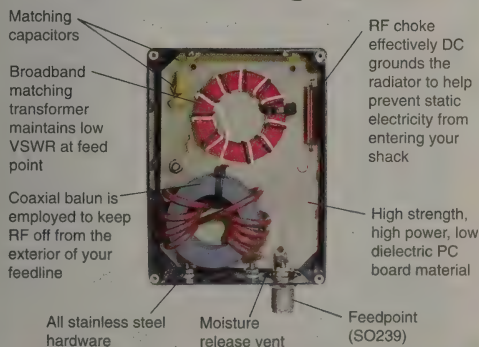
R7000 Trap



R7000's Rugged Design



R7000 Matching Network



R7000+

CUSHCRAFT

INTRODUCING R6000

6 - 20 Meters

The Shape of Things to Come

The NEW R6000 is a 6 through 20 meter, no ground radial antenna. It includes many of the features of the R7000, R7 and R5 antennas. R6000 means excellent performance, easy installation and use, slim silhouette and high reliability. There are no traps used on 6, 10 and 15 meters for maximum efficiency and power handling.

• EASY INSTALLATION

For typical use, tuning is not required

• AUTOMATIC BAND CHANGING

To any band 6 through 20 meters

• SLIM SILHOUETTE

Gain favor of family and neighbors with the slim, low profile of the R6000

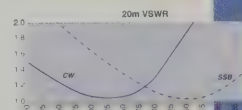
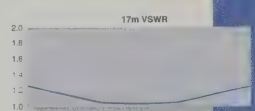
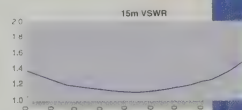
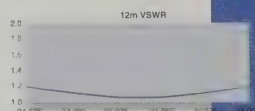
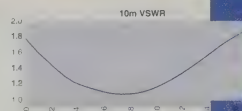
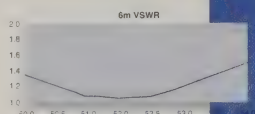
• 6 METER OPERATION

Join the fun of the "Magic Band" and take advantage of the new HF/50MHz transceivers

• AFFORDABLE PRICE

Cushcraft delivers the best quality and performance at a price no one else can match.

SPECIFICATIONS	R6000
Frequency, meters	6, 10, 12, 15, 17, 20
Gain, dBi	3
VSWR minimum	1.2:1 typical
2:1 bandwidth, KHz	6m >3000 10m >1700 12m >100 15m >450 17m >100 20m 300
Power, Watts output	1500
Radiation angle, deg.	16
Horizontal rad, deg	360
Height, ft (m)	19 (5.8)
Mast size range, in (cm)	1.5 -1.75 (3.8-4.4)
Wind load, ft ² (m ²)	1.5 (.14)
Weight, lb (kg)	12.5 (5.6)

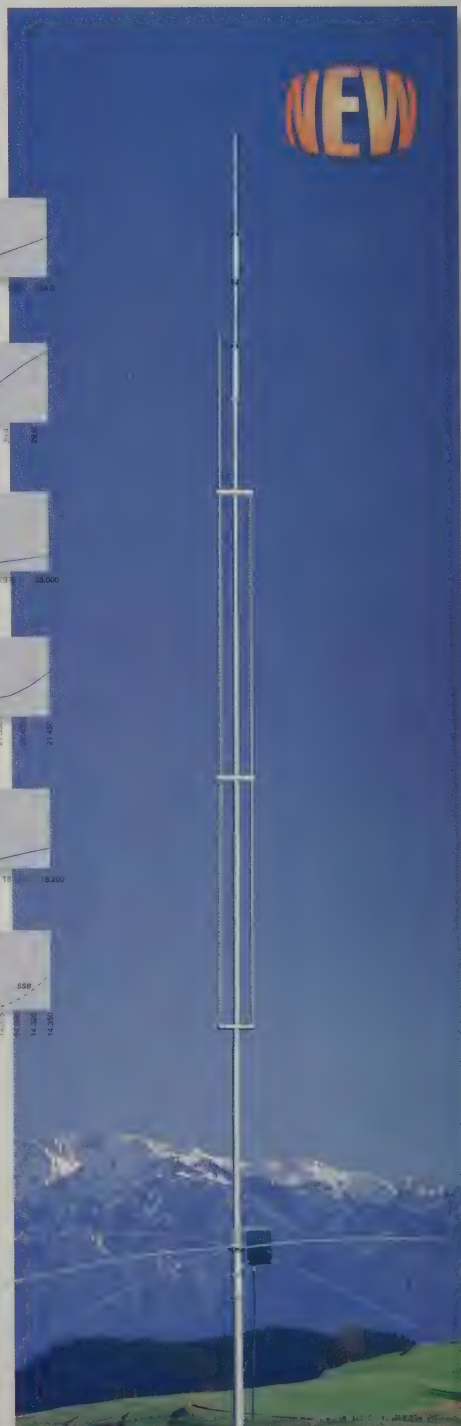



The R6000 employs quarter wavelength stubs on 10 and 15 meters to replace standard trap coils. The result is lower loss and wider bandwidth. The R6000 covers all bands 6 through 15 meters at a VSWR under 2:1. On 20 meters you can select the top 300 KHz or bottom 300 KHz of the band.

The R6000 weighs only 12-1/2 pounds (5.6 kg). It is lightweight and easy to mount for portable or permanent installations. Machined aluminum clamps and UV stable insulators guarantee years of reliable service. The R6000 comes with the standard Cushcraft warranty of one year from purchase - plus the industry's leading technical support team stands behind each Cushcraft antenna.

The R6000 makes an excellent diversity antenna to complement even the most complete stations. Or pack up the R6000 for a trip to the DX location of your dreams. With sunspots on the rise, amateurs worldwide are returning to the HF bands in large numbers. The R6000 will take you there first class for the exciting years ahead.

CUSHCRAFT



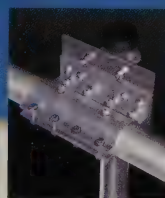


10, 15, 20 Meters

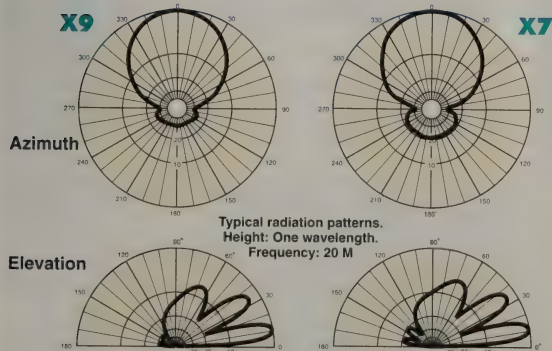
X9 & X7

The new X9 and X7 Triband Yagis are geared to set new standards in both radiating performance and mechanical reliability. Cushcraft's product development team has employed the latest computer modeling technology to achieve a superior electrical design as well as elegant new mechanical hardware and assembly techniques.

Each mechanical component was designed to 100+ MPH wind survival with a 1.25 safety factor. Traps were eliminated from the high current driven elements and reflectors using the new *4L Log Cell* design, which yields virtual monoband performance and maximum power handling capability. Traps are employed only in the lower current directors for increased gain and sharper pattern. The result is a truly high performance antenna family which will easily handle the legal limit.



- ▶ **New High Efficiency Computer Optimized Design for Maximum Gain and Ultra Clean Radiating Pattern**
- ▶ **100+ MPH Construction for Best Reliability and Long Life**
- ▶ **NEW 4L Log Cell Driven Elements for better VSWR Bandwidth**
- ▶ **Trapless Driven Elements and Reflectors for Reliable Power Handling**
- ▶ **Interleaved Element Design for Mono-Band Performance**
- ▶ **Add-on kits available for 40 Meters**



SPECIFICATIONS		X9	X7
Frequency Coverage (Meters)		10, 15, 20	10, 15, 20
Total number of Elements		9	7
Maximum Gain (dBi)	20M	13.0 @ 14 deg	12.5 @ 14 deg
@ One Wavelength	15M	13.9 @ 12 deg	13.0 @ 12 deg
	10M	14.0 @ 15 deg	12.9 @ 14 deg
Maximum Front to Back Ratio (dB)		30	30
Number of Elements per Band		4	3
VSWR Minimum		1.1:1	1.1:1
VSWR 1.5:1 Bandwidth (KHz)	20M	350	600
	15M	450	750
	10M	1500	1700
Longest Element, ft (m)		36.5 (11.12)	37.2 (11.33)
Turning Radius, ft (m)		21.7 (6.61)	20.0 (6.09)
Boom Length, ft (m)		28 (8.53)	18 (5.49)
Boom Diameter, in (cm)		2-1/2 (6.35)	2-1/2 (6.35)
Maximum Mast Diameter OD, in (cm)		2-1/2 (6.35)	2-1/2 (6.35)
Maximum Wind Survival, mph (kph)		>100 (>161)	>100 (>161)
Maximum Wind Surface Area, ft ² (m ²)		9.9 (.92)	7.9 (.73)
Windload @ 80 mph, lb (kg)		255 (116)	202 (92)
Maximum Power Handling (KW)		2	2
Weight, lb. (kg)		85 (38.5)	60 (27.2)

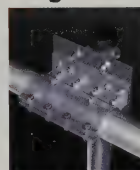
CUSHCRAFT

BIG THUNDER HF YAGIS

10 - 20 Meters



Big Thunder Hardware



Boom-to-Mast



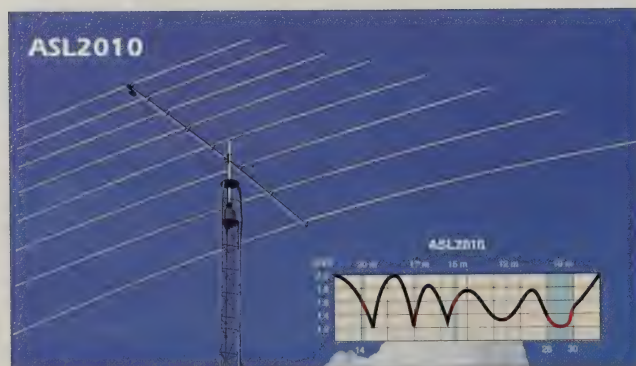
Element Hardware

Big Thunder Monobanders

XM240 - 40 Meter 2 Element Yagi. The famous 402CD two element 40 meter beam is now redesigned as the XM240. It features the same contest winning performance with a 90+ mph wind rating. A 2-1/2" OD boom and Big Thunder style 3/16" thick extruded element and boom plates are used to eliminate mechanical failures. A Phillystran boom truss and 1:1 high power balun are included.

XM - 10, 15 & 20 Meter 5 Element Yagis. Cushcraft announces new 5 element Monobanders for 10, 15 & 20 meters. Each XM model has Big Thunder hardware and high wind ratings. Phillystran boom trusses are used on 15 & 20 meter models. The feed systems are 50 ohm direct feed - dual driven elements. VSWR is flat across the band. A high power 1:1 balun is included. Big Thunder Monobanders were Beta tested at three extreme bad weather sites for the winter 1997/1998 season. They have excellent patterns and are perfect for stacks.

	XM240	XM520	XM515	XM510
Frequency, MHz	7.0 - 7.3	14.0 - 14.35	21.0 - 21.45	28.0 - 29.7
Number Elements	2	5	5	5
Forward Gain Free Space, dBi	7.0	9.3	9.3	9.3
Fwd Gain @ 1 Wavelength Ht, dBi @ 14 deg	12.5	14.4	14.4	14.4
Front to Back Ratio, dB	20-25	20-30	20-30	20-30
VSWR Typical Minimum	1.1:1	1.1:1	1.1:1	1.1:1
VSWR 1.5:1 Bandwidth, KHz	150	> 350	> 500	> 1700
Power Rating, Watts Output	1500	1500	1500	1500
3dB Beamwidth, Degrees	70	52	52	52
Side Lobe Attenuation, dB	>35	>40	>40	>40
Boom Length, feet (m)	23	35	24	19
Boom Diameter, inches (cm)	2.5 (6.3)	2.5 (6.3)	2.5 (6.3)	2.5 (6.3)
Longest Element, feet (m)	43 (13.1)	36.3 (11.1)	24 (7.3)	18 (5.5)
Turning Radius, feet (m)	24.3 (7.4)	25.9 (7.9)	16 (4.9)	11.5 (3.5)
Max Mast Size, inches (cm)	2.5 (6.35)	2.5 (6.35)	2.5 (6.35)	2.5 (6.35)
Wind Surface Area, sq ft (sq m)	5.5 (.51)	9.7 (.90)	5.2 (.48)	3.4 (.32)
Wind Load @ 80 mph, lbs (kg)	142 (64.4)	250 (113.4)	135 (61.2)	90 (40.8)
Weight, lbs (kg)	59 (26.8)	75 (34.0)	45 (20.4)	35 (15.9)



The ASL2010 log periodic antenna is the most cost effective, high gain, five band antenna solution on the market today. Skylog offers continuous operation from 13.5 to 32 MHz. Antenna gain and beamwidth are constant for uniform coverage from 10 through 20 meters. The ASL2010 is rated for continuous duty at full legal power. Skylog is designed for maximum gain on a manageable 18 foot boom with only 10.1 square feet of wind surface area. All stainless steel hardware and rugged element design are only some of the many features that provide years of superior antenna performance. Skylog ASL2010 is the smart choice for multiband HF operation.

Skylog

- Continuous five band coverage from 13.5 to 32 MHz
- Constant gain over entire frequency range
- 6.4 dBi gain, 65 degree beamwidth
- High efficiency design, antenna stays cool and VSWR steady
- 18 foot boom and 19.5 foot turning radius

MODEL	ASL2010
Frequency, MHz	13.5-32
No. Elements	8
Forward Gain, dBi	6.4
Front to Back Ratio, dB	15-20
SWR 1.2:1 Typical	
2:1 Bandwidth	18.5 MHz
Power Rating, Watts PEP	2000
3dB Beamwidth, Degrees	
E Plane	65
Boom Length, ft (m)	18 (5.48)
Boom Diameter, in (cm)	2.0 (5.08)
Longest Element, ft (m)	38 (11.58)
Element Ctr Dia., in (cm)	1.25 (3.18)
Turning Radius, ft (m)	19.25 (5.86)
Mast Size Range, in (cm)	1.5-2 (3.8-5.1)
Wind Load, ft ² (m ²)	10.1 (.93)
Weight, lb (kg)	55 (25.5)

CUSHCRAFT



A4S Four Element Beam - 10, 15 & 20 Meters

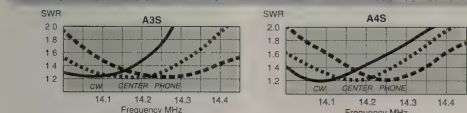
With stainless steel hardware.

The A4S is the true, high performance tribander. Precisely tuned high-power traps, carefully selected element lengths, and proper spacing combine to make the A4S the preferred antenna for your HF work! This is the premium antenna with all the features that you want. High gain, low SWR, and wide bandwidth keep the contacts coming in. All U-bolts, clamps and hardware are stainless steel. The A4S has pinned boom sections and formed aluminum brackets to keep elements straight under all conditions. Our solid construction keeps the A4S on the tower! Add 40 meters with A744 kit.

A3S Three Element Beam - 10, 15 & 20 Meters

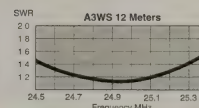
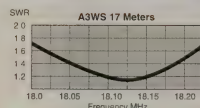
With stainless steel hardware.

The A3 World Ranger, our top selling tribander, has become the A3S with all stainless steel hardware. It's a real power-house in a small space and lets you work the pile-ups with confidence. All you need is a lightweight tower and rotator to enjoy the benefits of the A3S. It's a proven performer in DX-peditions and contests and handles full power from your linear. Construction features include pinned boom sections, heavy duty element clamps with backing plates plus all stainless steel hardware. When space is at a premium, but you want the benefits of a full-size tribander, the A3S is right for you! Add 40 meters with A743 kit.



A3WS WARC Bands 3 Element - 12 & 17 Meters

Enjoy the excitement of the WARC bands with this popular beam. The A3WS gives full performance on 12 and 17 meters. With the addition of our easy-to-use A103 add on kit, it will also cover 30 meters. A3WS needs only a lightweight tower and rotator or you can mount it above an existing tribander. Construction features include pinned boom sections, heavy duty element clamps with backing plates plus all stainless steel hardware.



MODEL	A4S	A3S	A3WS
Frequency, MHz	28, 21, 14	28, 21, 14	24, 18
No. Elements	4	3	3
Forward Gain, dBi	8.9	8.0	8.0
Front to Back Ratio, dB	25	25	25
SWR 1.2:1 Typical			
2:1 Bandwidth KHz	>500	>500	300
Power Rating, Watts PEP	2000	2000	2000
3 dB Beam Width, Deg. E Plane	58	60	60
Boom Length, ft (m)	18 (5.48)	14 (4.27)	14 (4.27)
Boom Diameter, in (cm)	2 (5.10)	1.5 (3.81)	1.5 (3.81)
Longest Element, ft (m)	32 (9.75)	27.75 (8.45)	25.1 (7.66)
Element Center Dia, in (cm)	1.25 (3.18)	1.25 (3.18)	1.25 (3.18)
Turning Radius, ft (m)	18.4 (5.49)	15.5 (4.72)	14.4 (4.4)
Mast Size Range, in (cm)	1.25-2.00 (3.18-5.08)	1.25-2 (3.18-5.08)	1.25-2 (3.18-5.08)
Wind Load, ft ² (m ²)	5.50 (0.51)	4.36 (0.47)	4.1 (0.38)
Weight, lb (kg)	37 (16.8)	27 (12.9)	22.5 (10.2)

40 meters will come alive by adding one of these kits to the dipole of your A3S or A4S. The kits include high power traps with heavy wall fiberglass insulator and all hardware. A simple adjustment allows 30 meter operation. For our newest beam, the A3WS, we have a 30 meter add on kit the A103.

A743 7 MHz/10 MHz kit for A3S

A744 7 MHz/10 MHz kit for A4S

A103 10 MHz kit for A3WS

30 & 40 Meter Add-On Kits - For A3S, A4S & A3WS

MODEL	A743/A744	A103
BAND	7 MHz (40 m)	10 MHz (30m)
Driven Element with Adapter kit, ft (m)	33.19 min. 27.12 min. 35.33 max. 28.4 max. (10.12-10.77) (8.27-8.66)	32.1 (9.8)
Windloading ft ² (m ²)	.58 (.05)	.27 (.03)
Bandwidth, KHz	125	150
Power Rating, Watts	2000 PEP	2000 PEP
Side Rejection, dB	20	20
Weight, lb (kg)	3.44 (1.56)	2.29 (1.04)

Rotatable Dipoles

Our World Ranger Dipoles give bi-directional patterns and rotatable convenience. You can mount them high and away from the trees for better performance than a wire dipole. These single and multi-band dipoles feature high-performance traps, heavy wall tubing, and rugged hardware for years of enjoyment.



MODEL	D40	D4	D3	D3W
Frequency, MHz	7	28,21,14,7	28,21,14	24,18,10
SWR 1.2:1 Typical				
2:1 Bandwidth, KHz	200	>350 40-125	>500	>200
Power Rating				
Watts PEP	2000	2000	2000	2000
Length ft (m)	42.25 (12.88)	35.8 (10.92)	25.8 (7.86)	34.0 (10.37)
Mast Size, in (cm)	1.5-2 (3.8-5)	1.5-2 (3.8-5)	1.5-2 (3.8-5)	1.5-2 (3.8-5)
Wind Load, ft ² (m ²)	1.3 (.12)	1.3 (.12)	.9 (.08)	.9 (.08)
Weight, lb (kg)	12 (5)	13 (6)	9 (4)	11 (5)

DUAL BAND RINGOS & YAGIS

70 CM, 2 Meters

Cushcraft is the leader in dual band antennas. Our verticals provide excellent coverage at a price below the competition. The AR270 and AR270B are favorites with the AO27 crowd. For increased coverage, our dual band Yagis lead the way. Both Yagis require only one coax feedline for true dual band performance.

AR270B 5.5/7.5 dB Dual Band Ringo

This model gives very high gain with a low angle of radiation and it is only 7.7 feet (2.35 m) high. The AR270B is computer optimized with two 5/8 wavelength collinear elements on 2 meters and four 5/8 wavelength elements on 70 cm. It is broadbanded for minimum SWR on both bands. It is easy to assemble with three rugged aluminum tubing sections, a durable mast mount and factory sealed coils for best performance.

AR270

3.0 / 5.5 dB Dual Band Ringo

The "Dual Wonder"

AR270 is only 3.75 feet (1.1 meters) high. It has great performance for its size, making it the most popular 2m/70 cm base antenna.

MODEL	AR270		AR270B	
Frequency, MHz	144-148	430-450	144-148	430-450
SWR 1.2:1 Typical				
2:1 Bandwidth, MHz	>4	>15	>4	>15
Gain, dBi	3.0	5.5	5.5	7.5
Power, Watts FM	250	250	250	250
Horizontal Radiation				
Pattern, Degrees	360	360	360	360
Height, ft, (m)	3.75 (1.13)		7.7 (2.3)	
Mast Size Range, in	1.25-2 (3.2-5.1)		1.25-2 (3.2-5.1)	
Radial Length, in (cm)	6.75 (17.1)		6.75 (17.1)	
Wind Load, ft ² (m ²)	0.27 (0.03)		0.47 (0.044)	
Weight, lb (kg)	2 (0.9)		2.4 (1.09)	



A27010S and A2706S

10 and 7.8 dB Dual Band Yagis

Increase your range by selecting one of the new Cushcraft dual band Yagis on 2 meters and 70 cm. You can point the antenna at stations while you are in QSO with them. This will direct more of your output power when transmitting at the same time reducing interference and increasing signal strength when receiving. These antennas are perfect for packet applications. Assembly is a snap with our fully illustrated assembly manuals.



Cushcraft pioneered dual band side-by-side Yagis. The harmonic relationship of 2 meters and 70 cm allow clean radiation patterns with minimal interaction.

MODEL	A27010S		A2706S	
Frequency, MHz	144-148	430-450	144-148	430-450
No. Elements	5	5	3	3
Forward Gain, dBi	10	10	7.8	7.8
Front to Back Ratio, dB	20	18	20	18
SWR 1.2:1 Typical				
2:1 Bandwidth, MHz	≥4	≥10	≥4	≥20
Power Rating, Watts PEP	350	350	350	350
3dB Beamwidth, Degrees				
E Plane	52	52	66	66
H Plane	60	60	108	108
Boom Length, ft (m)	6.17 (1.9)		2.8 (.85)	
Longest Element, in (cm)	40.3 (102.4)		41 (104.1)	
Turning Radius, ft (m)	6 (1.8)		2.8 (.85)	
Mast Size Range, in (cm)	1.25-2 (3.2-5.1)		1.25-2 (3.2-5.1)	
Wind Load, ft ² (m ²)	.725 (.07)		.3 (.02)	
Weight, lb (kg)	1.8 (.81)		1.7 (.8)	

CUSHCRAFT

RINGO RANGER II, RINGO RANGER, RINGO



70 CM, 1 1/4 M, 2 M

Our Ringos are Number One.

Tough performers at a good price! The Ringo family of dependable, cost-effective antennas has served more hams - from novice to veteran extra - than any other amateur antenna made. Simple, straightforward design, light weight and quick, easy installation make the durable Ringo family right for you. Ringo's top performance and low cost mean more dB per dollar - an equation anyone can appreciate.

Ringo Ranger II

Our Ringo Ranger II has more gain, less windload, and more mechanical integrity than other two meter antennas. You'll quickly appreciate the benefits of this amazing antenna! Based on the original W1BX Ringo, the Ringo Ranger II is the latest design featuring three 5/8 wave radiating elements and an adjustable 1/8 wave phasing stub. The result is a very low angle of radiation over your coverage area.

The Ringo Ranger II has built-in lightning protection, UV-stabilized insulators, heavy wall tubing, improved decoupling radials to eliminate feedline radiation, and all-weather performance.

MODEL	ARX2B	ARX220B	ARX450B
Frequency, MHz	135-160	222-225	435-450
SWR 1.2:1 Typical			
2:1 Bandwidth, MHz	>3	>5	>10
Gain, dBi	7.0	7.0	7.0
Power Rating, Watts FM	1000	500	500
Radiation Angle, Deg.	7	7	7
Horizontal Radiation			
Pattern, Degrees	360	360	360
Ring Diameter, in (cm)	5 (12.7)	5 (12.7)	3.5 (8.9)
Radiator Base Dia, in (cm)	.75 (1.9)	.75 (1.9)	.50 (1.2)
Height, ft, (m)	14 (4.3)	9.3 (2.8)	4.9 (1.5)
Mast Size Range, in (cm)	1.0-1.25 (2.54-3.1)	1.0-1.25 (2.54-3.1)	.75-.88 (1.9-2.22)
Radial Length, in (cm)	20.5 (52.1)	13.75 (33.7)	6.75 (17.1)
Wind Load, ft ² (m ²)	0.5 (0.05)	0.3 (0.03)	0.2 (0.02)
Weight, lb (kg)	6 (2.7)	5 (2.3)	1 (.45)



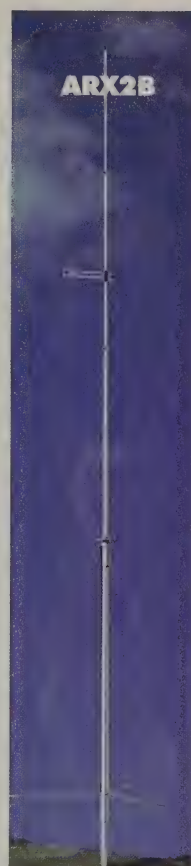
Some hams comment on the ARX2B:

"Since I put this antenna up I have received many compliments on the improvement of my signal." (N3LHP)

"The only antenna I ever installed that worked like it should the first time." (N7PGH)

"ARX2B is a good antenna for my use on 2 meters FM...Several on the air in my area." (N9OPL)

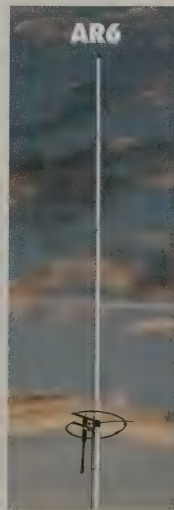
"ARX2B...the best antenna." (XE2CLB)



Ringo

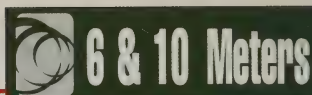
These are the original W1BX FM Ringos. If you want a combination of compact size, wide bandwidth, a low radiation angle, these economical antennas are just for you. Since radials are not needed, you can even use our Ringos indoors. Our Ringos are 1/2 wave and include built-in lightning protection. Put up one of these easily installed antennas and start enjoying FM!

MODEL	AR2	AR6	AR10	AR220	AR450
Frequency, MHz	135-160	50-54	28-29.7	222-225	440-460
SWR 1.2:1 Typical					
2:1 Bandwidth, MHz	10	2	>1.5	10	20
Gain, dBi	3	3	3	3	3
Power Rating, Watts FM	1000	1000	1000	500	500
Radiation Angle, Deg.	16	16	16	16	16
Horizontal Radiation					
Pattern, Degrees	360	360	360	360	360
Ring Diameter, in (cm)	5 (12.7)	13 (33)	13 (33)	5 (12.7)	3.5 (8.9)
Radiator Base Dia, in (cm)	.75 (1.9)	1 (2.5)	1 (2.5)	.75 (1.9)	.5 (1.3)
Height, ft, (m)	3.9 (1.2)	10.1 (3.1)	17.6 (5.36)	2.6 (.78)	1.4 (.43)
Mast Size Range, in (cm)	1-1.25 (2.54-3.1)	1-1.25 (2.54-3.1)	1-1.25 (2.54-3.1)	1-1.25 (2.54-3.1)	.75-.88 (1.9-2.22)
Wind Load, ft ² (m ²)	.21 (.02)	.37 (.03)	1.68 (.16)	.21 (.02)	.1 (.01)
Weight, lb (kg)	1.5 (.68)	2.5 (1.1)	4 (1.8)	1.2 (.55)	1 (.45)



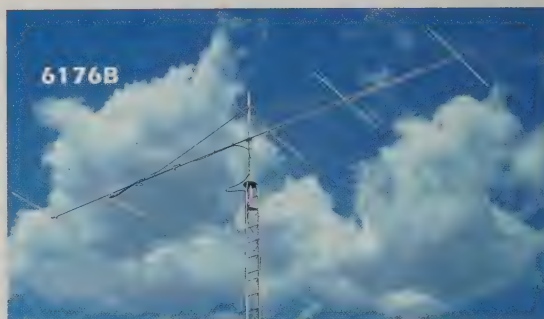
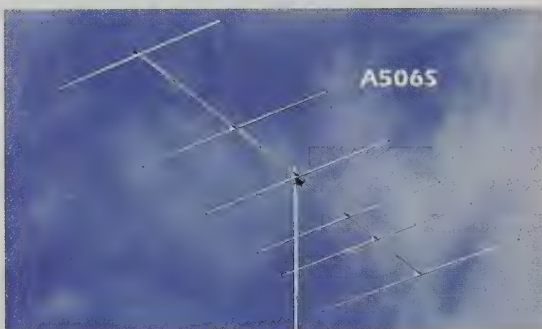
CUSHCRAFT

6 & 10 Meter Yagis



6 Meter Yagis - SSB/CW/FM

Computer-aided modeling and test range techniques were used by Cushcraft engineers to further optimize the performance of our popular 6 meter Yagis. This process means more gain and cleaner patterns with excellent front-to-back ratios. S-models have very broad bandwidth so they will not detune in bad weather. They feature stainless steel hardware for long trouble-free life. Enjoy the new popularity and exciting contacts on the 6 meter band with one of the S-series Cushcraft Yagis. The A503S, A505S and A506S may be mounted vertically for FM use.



6176B

The 6176B is the favorite 6 meter contest/DX antenna for all the "Big guns". Extra wide element spacing gives maximum gain and a clean pattern. Even with a 34 foot (10.4m) boom, the 6176B weighs only 26 pounds (11.8 kg).



10 Meters

Looking for a lightweight, economical alternative to the 10 meter big boys? Choose the TEN3. Although it's popular with novices and technicians, this antenna is for any ham who wants more gain with a good front to back ratio on 10 meters. This antenna has an 8 foot boom (2.4m) making it easy to install on a very simple mount with only a light rotator. The matching system is our proven Reddi-Match for 50 Ohm no balun feed and SO-238 connector. Make more positive contacts with the TEN3.

MODEL	A503S	A505S	A506S	6176B	TEN3
Frequency, MHz	50-54	50-54	50-54	50-51	28-29.7
No. Elements	3	5	6	6	3
Forward Gain, dBi	8	10.5	11.6	14.0	8
Front to Back Ratio, dB	20	24	26	30	25
SWR 1.2:1 Typical					
2:1 Bandwidth, MHz	>1	>1	>1	>1	>1.5
Power Rating, Watts PEP	1000	1000	1000	2000	2000
3dB Beamwidth, Degrees					
E Plane	76	56	48	2 x 19	64
Boom Length, ft (m)	6 (1.8)	12 (3.7)	20 (6.1)	34 (10.36)	8 (2.44)
Longest Element, in (cm)	117 (300)	123 (312)	119 (302)	117 (297.2)	18 (5.49)
Turning Radius, ft (m)	6 (1.8)	7.8 (2.37)	11.5 (3.5)	17.7 (5.39)	9.8 (3.0)
Mast Size Range, in (cm)	1.5-2 (3.8-5.1)	1.5-2 (3.8-5.1)	1.5-2 (3.8-5.1)	1.5-2 (3.8-5.1)	1.5-2 (3.8-5.1)
Wind Load, ft2 (m2)	1.80 (0.17)	2.9 (0.273)	4.46 (.41)	4.8 (.45)	2.0 (.20)
Weight, lb (kg)	7 (3.2)	11 (5.0)	18 (8.2)	26 (11.79)	9.9 (4.45)

CUSHCRAFT

BOOMER SIDEBAND/CW YAGIS



2 Meters

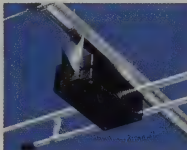
13B2 - 13 Element Wideband Boomer

The 13B2 is as versatile as the 17B2 is specialized. 13B2 will be your choice for high performance across the entire 2 meter band. New and experienced hams will enjoy 15.8 dBi gain on FM, packet, CW, or sideband across the 4 MHz operating range. The 13B2 is easily mounted vertically or horizontally for maximum performance on your favorite mode. Its optimum boom length makes it a popular antenna that fits just about anywhere. The new UltraMatch balanced feed on the 13B2 provides a 50 Ohm match via a standard SO-239 UHF female connector. Model **13B2N** has N connector.

17B2 - 17 Element CW/SSB Boomer

The serious two meter operator who is interested in EME, aurora, scatter, SSB, CW, tropo etc, will choose the 17B2. It has 17 elements on a 4.5 wavelength boom. Our computer-aided design supported by precise test range data and the latest manufacturing technology gives you a cleaner pattern and 18 dBi gain in this long boom design. Significant enhancement is provided by the new UltraMatch balanced feed system with N-connector.

The new Cushcraft UltraMatch is a modified T-match system that provides a balanced current distribution on your Boomer. It uses UltraLink teflon® dielectric cable allowing for low loss high power applications. UltraMatch is completely enclosed for weather proofing. UltraMatch features an N-connector on the 17B2 and UHF SO239 on the 13B2. When all weather performance is important, you will choose the new UltraMatched Boomers everytime.

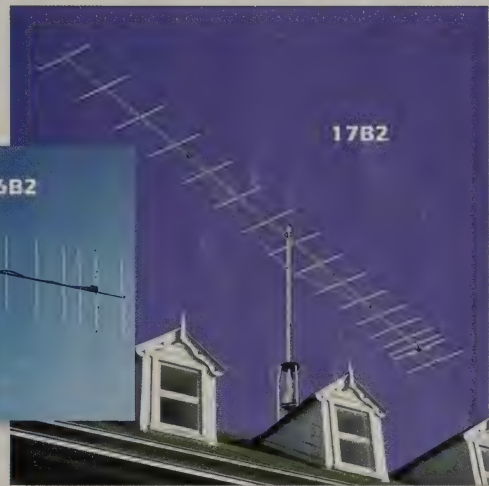


26B2 - 26 Element Wideband Boomer

This antenna offers the highest gain of any 2 meter FM antenna in the world. The 26B2 includes two complete 13B2 antennas, stacking boom and phasing harnesses.

124WB - 4 Element Wideband Boomer

This is the right choice for packet systems and other applications requiring a dedicated directional antenna.

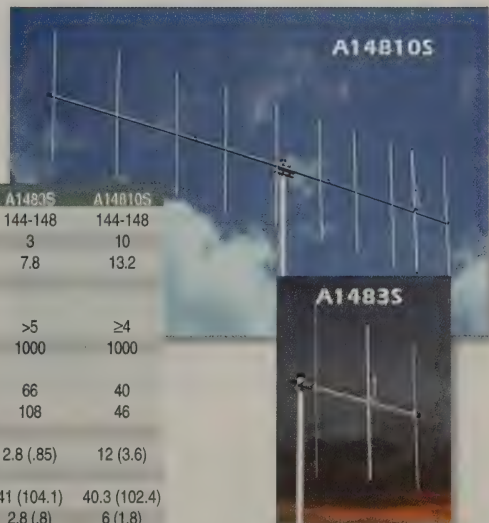


A14810S & A1483S 2M Yagis

These antennas are the newest computer optimized models of our 2 meter Yagis. We have improved both the pattern and gain to give you better FM coverage.

The A1483S is the low priced quality leader for Packet, FM or even portable use. It is easily rear mounted.

A14810S is one of our best value designs with excellent gain and front-to-back ratio. Use it for long range FM or full band 2 meter operation.



MODEL	13B2	17B2	124WB	26B2	A14810S	A1483S
Frequency, MHz	144-148	144-145	144-148	144-148	144-148	144-148
No. Elements	13	17	4	26	3	10
Forward Gain, dBi	15.8	18.0	10.2	18.8	7.8	13.2
Front to Back Ratio, dB	26	26	19	26		
SWR 1.2:1 Typical						
2:1 Bandwidth, MHz	>4	>2	4	>4	>5	≥4
Power Rating, Watts PEP	2000	2000	2000	2000	1000	1000
3 dB Beamwidth, Degrees						
E Plane	2 x 18	2 x 14.5	60	2x18	66	40
H Plane	2 x 19	2 x 15	88	2x9.5	108	46
Side Lobe Atten., dB, E Plane	>60	>60	40	>60		
Boom Length, ft (m)	15 (4.57)	31 (9.45)	4 (1.22)	15 (4.57)	2.8 (.85)	12 (3.6)
Electrical Wavelength	2.2	4.5	.5	2.2		
Longest Element, in (cm)	39.75 (101)	40.75 (103.5)	40.75 (104)	39.75 (101)	41 (104.1)	40.3 (102.4)
Turning Radius, ft (m)	8.9 (2.7)	17.25 (5.26)	4 (1.22)	10.4 (3.18)	2.8 (.8)	6 (1.8)
Mast Size Range, in (cm)	1.5-2 (3.8-5.1)	1.5-2 (3.8-5.1)	1.25-2 (3.2-5.1)	1.5-2 (3.8-5.1)	1.25-2 (3.2-5.1)	1.25-2 (3.2-5.1)
Wind Load, ft² (m²)	1.8 (.17)	3.9 (.36)	.34 (.034)	4.84 (.45)	.27 (.02)	1.21 (.11)
Weight, lb (kg)	6.7 (.31)	15.75 (7.14)	3 (1.36)	21.5 (9.75)	1.5 (.7)	6 (2.7)

CUSHCRAFT

UHF/VHF YAGIS



70 CM, 1 $\frac{1}{4}$ M, 2 M

A14820T 2 Meter Hi-Lo Cross Yagi

Here's the antenna that solves multi-mode problems! Ten vertically polarized and ten horizontally polarized elements provide 11.1 dBi gain covering 144-148 MHz. The horizontal elements handle your CW and SSB needs, while the vertical elements cover FM. Hardware is stainless steel. Separate coax feeds allow polarization changes.

A14820T has a boom length of 11 ft. (3.4m), longest element length of 40.6 in. (103cm), wind area of 1.21 ft² (.11m²), and a mast size of 1.25-2 in. (3.2-5.1 cm).



225WB



224WB

A4496S

A4496S/A44911S

Use one of these 440 MHz beams for your FM/Package needs. Both work great for vertical or horizontal polarization.



A44911S



719B

719B FM, CW and SSB 15.5 dBi

Looking for an antenna to enhance performance on all modes of the 70 CM band? The 13.5 foot long 719B is the right choice. Mount it vertical for FM or horizontal for CW and Sideband. The 719B joins the 2 meter 13B2 as a classic for improved performance.



A14820T

224WB/225WB 220 MHz Widebands

These 222 MHz beams are perfect for Packet, FM repeaters, or sideband/CW. Both antennas can be mounted for vertical or horizontal polarization.

MODEL	224WB	225WB
Frequency, MHz	222-225	222-225
No. Elements	4	15
Forward Gain, dBi	10.2	15.5
Front to Back Ratio, dB	24	24
SWR 1.2:1 Typical		
2:1 Bandwidth, MHz	>5	>5
Power Rating, Watts PEP	2000	2000
3dB Beamwidth, Degrees		
E Plane	60	2x17
H Plane	88	2x19
Side Lobe Attenuation, dB E Plane	40	60
Boom Length, ft (m)	3 (.91)	10 (3.05)
Electrical Wavelength	0.5	2.2
Longest Element, in (cm)	26.7 (68)	26.3 (67)
Turning Radius, ft (m)	3 (.91)	5.8 (1.78)
Mast Size Range, in (cm)	1.25-2 (3.2-5.1)	1.25-2 (3.2-5.1)
Wind Load, ft ² (m ²)	.23 (.021)	.95 (.09)
Weight, lb (kg)	1.7 (.77)	5.25 (2.4)

MODEL	719B	729B	A4496S	A44911S
Frequency, MHz	430-450	430-440	440-450	440-450
No. Elements	19	29	6	11
Forward Gain, dBi	15.5	17.8	10.5	13.2
Front to Back Ratio, dB	25	25	18	20
SWR 1.2:1 Typical				
2:1 Bandwidth MHz	20	>10	>10	>10
Power Rating, Watts PEP	2000	2000	350	350
3 dB Beamwidth, Degrees				
E Plane	24	20	60	48
H Plane	19	22		
Side Lobe Atten., dB, E Plane	60	60		
Boom Length, ft (m)	13.5 (4.1)	22.17 (6.75)	2.9 (0.89)	4.2 (1.35)
Electrical Wavelength	6	9.8		
Longest Element, in (cm)	13.75 (34.9)	13.75 (34.9)	13 (33)	13 (33)
Turning Radius, ft (m)	7.25 (2.2)	12.5 (3.8)	2.9 (.89)	2.8 (.85)
Mast Size Range, in (cm)	1.25-2 (3.2-5.1)	1.25-2 (3.2-5.1)	1.25-2 (3.2-5.1)	1.25-1.5 (3.2-3.8)
Wind Load, ft ² (m ²)	1.2 (.11)	2.2 (.21)	0.30 (0.03)	0.39 (0.04)
Weight, lb (kg)	5.6 (2.55)	8.6 (3.9)	3 (1.4)	4 (1.8)

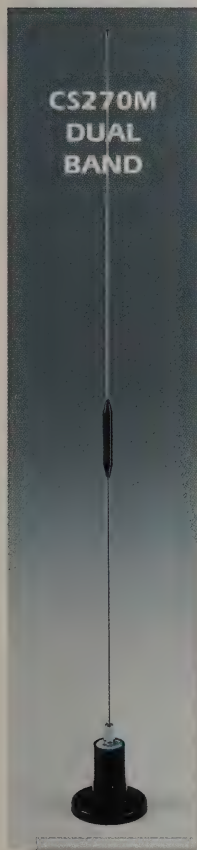
CUSHCRAFT

MOBILE ANTENNAS



Cushcraft mobiles offer the high performance that you need for consistent mobile communications such as commuting and public service activities. These antennas are the choice of hams and communications professionals around the world who demand high quality, premium products.

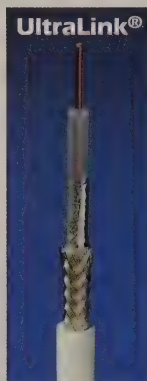
SEE YOUR LOCAL DEALER'S CUSHCRAFT MOBILE DISPLAY



BLACK MAG MOUNT



TRUNK LIP MOUNT



CS28M Ten Meter Mag-Mount

The CS28M ten meter mag-mount has become a constant companion to today's popular 10 meter multimode mobile rigs. The CS28M comes complete, ready to go with a 49" stainless steel whip and a Euro-Style black poly-coated 90 pound pull magnet. A heavy rubber pad protects your car's finish; twelve feet of Cushcraft's own UltraLink® low-loss cable (specifically designed for commercial mobile applications to 900 MHz) and PL259 connector are included with the CS28M.

CS Series Economy Mobile Antennas

Cushcraft's years of commercial and amateur experience apply cutting-edge designs to consistently high quality materials to produce the best mobile antennas you can buy.

All inductors and coil contacts are silver plated for better RF conductivity. All Cushcraft mobile hardware is brass to prevent the seizing inherent with inferior, dissimilar- metal joints. Our mobile coil housings are ABS, impervious to temperature changes and ultraviolet radiation. Brass base threads, ultrasonically welded into coil housings, eliminate premature failures associated with inferior fastening techniques, and Cushcraft insert-molded 440 MHz phasing coils assure weather-tight integrity. Only Cushcraft mobile antenna mounts are entirely 50 Ohms, eliminating lossy "VSWR bumps" common in many well known designs.

UltraLink® Cable

Cushcraft UltraLink cable was designed specifically for high efficiency commercial mobile applications to 900 MHz. UltraLink's RG-58 size allows easy installation through the tightest openings, while its Teflon® dielectric provides the highest temperature tolerance to handle vehicle hot-spots that would melt other dielectric materials. Additional 100% shielding is provided by a jacket of easy-peel foil. All this is covered by 97% braid for easy, secure connector attachment. More of your signal will get through with UltraLink than with any other mobile cable.

CS270M Dual Band Mag-Mount

The CS270M 2 meter/70 cm dual band mobile antenna leads the industry in performance, quality and value. The weather sealed base, stainless whip, enclosed coil and 90 pound pull magnet at such a low price is a real bargain.

CSMG, CGMG Magnetic Mounts

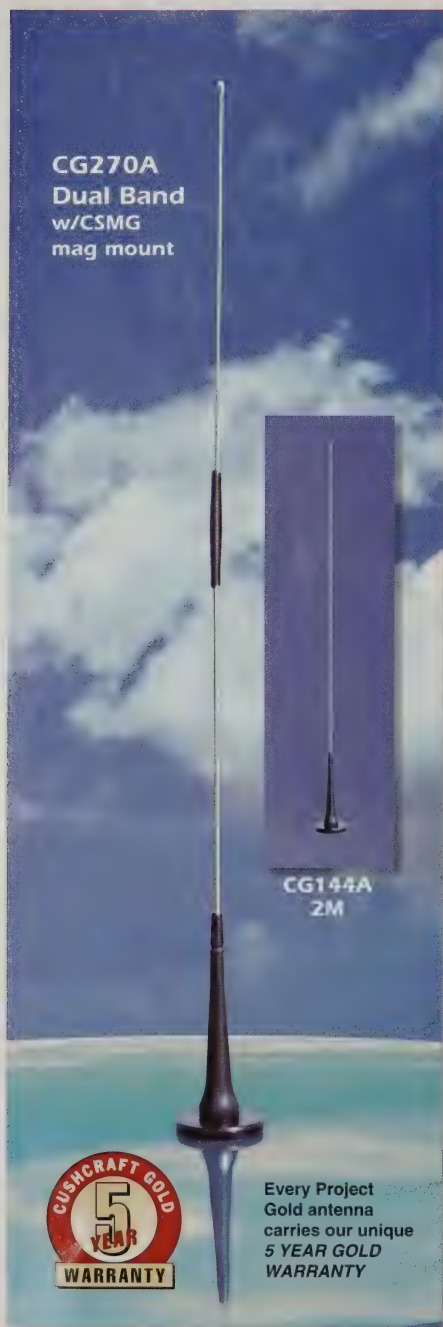
Cushcraft mag-mounts stay where you put them. Our 90 and 165 pound pull magnets are the best you'll find. Euro-style black poly finish protects against rust, and a tough rubber pad gives maximum protection to your vehicle's finish. UltraLink® cable on all Cushcraft mobile antennas means more of your signal reaches your antenna every time you key the mike.

Model No.	Frequency MHz	Whip Length Inches	Meters	Description
Dualband 2m/70cm				
CG270A	144-148 & 430-450	34	0.86	NMO mt required (CGMG, CGMGN).
CS270A	144-148 & 430-450	34	0.86	NMO mount required
CS270M	144-148 & 430-450	34	0.86	NMO, includes Magnet Mount
10 Meters				
CS28M	28-30	49	1.25	NMO, includes Magnet Mount
6 Meters				
CS50M	46-54	49	1.25	NMO, includes Magnet Mount
2 Meters				
CG144A	144-148	49	1.25	NMO mount required
CS147A	144-148	49	1.25	NMO mount required
CS147M	144-148	49	1.25	NMO, includes Magnet Mount
222 MHz				
CS220M	222-225	33	0.84	NMO, includes Magnet Mount
440 MHz				
CS450M	430-450	29.5	0.75	NMO, includes Magnet Mount
Mobile Mounts				
CSMG	90 lb pull magnet, NMO mount, PL259 & 12 feet UltraLink Cable			
CSMGN	90 lb pull magnet, NMO mount, N connector & 12 feet UltraLink Cable			
For "Gold" Antennas				
CGMG	165 lb pull magnet, NMO mount, PL259 & 12 feet UltraLink Cable			
CGMGN	165 lb pull magnet, NMO mount, N connector & 12 feet UltraLink Cable			
CSL	Trunk lid mount, NMO mount, PL259 & 12 feet UltraLink Cable			

CUSHCRAFT

GOLD SERIES MOBILES

70 CM, 2 Meter



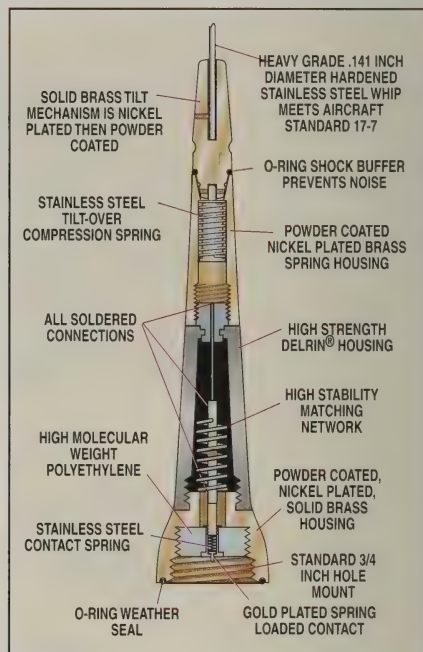
The World's Finest Dual Band Antennas

We challenged our PROJECT GOLD design team to develop the best mobile antenna for today's amateur. PROJECT GOLD combines the best in materials and performance into a series of great antenna designs.



EASY TOUCH™ LIFT & TILT-OVER FEATURE

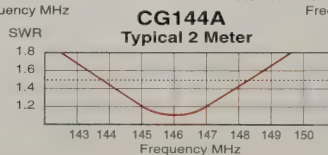
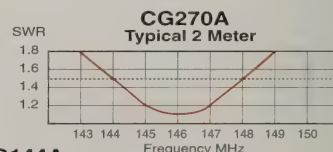
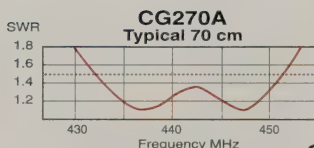
Easily tilts over for entry into low clearance garages.



	CG270A	CG144A
Frequency (MHz)	144-148	144-148
	440-450	
Gain @ 2m (dB)	3.7	3.0
@ 70cm (dB)	5.5	
Wavelength @ 2m	1/2	5/8
@ 70cm	1/2 over 5/8	
SWR (typ. less than)	1.5:1	1.5:1
Power Rating (Watts)	250	250

Mag Mounts for Above

CGMG 165 lb. mag mt, PL259 & UltraLink® low loss Teflon® cable
CGMGN 165 lb. mag mt, N-conn & UltraLink® low loss Teflon® cable



CUSHCRAFT



Fast Acting Gas Discharge Lightning Arresters

Protect your valuable equipment from unplanned current surges with a Cushcraft constant impedance LAC4 arrester! The LAC4 has a replaceable gas discharge tube which clamps voltage surges to less than 50 volts in about 100 nanoseconds-much quicker than the voltage rise time of lightning.

You cannot afford to be without lightning protection. One of the models below is right for your shack.

With UHF connector models - 1 MHz to 500 MHz.
With N connector models - 1 MHz to 3000 MHz

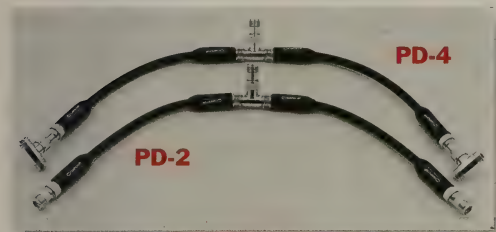
LAC4 200 Watt with UHF SO-239 connectors
LAC4H 2 kW with UHF SO-239 connectors
LAC4N 200 Watt with N connectors
LAC4NH 2 kW with N connectors
LC2 200 Watt replacement cartridge
LC2KW 2 kW replacement cartridge



Power Dividers For Boomers

Our power dividers make it a snap to stack Cushcraft Boomers. Models for 17B2 have N-connectors. They are available for these antennas:

PD-2 for two 13B2, UHF connectors
PD-2N for two 17B2, N connectors
PD-4 for four 13B2, UHF connectors
PD-4N for four 17B2, N connectors



Stacking Harnesses For Boomers

For even easier installation of our Boomers, use our installation kits that are complete with harness and power divider. Models for 17B2 have N-connectors.

22-SK for two 13B2's
22N-SK for two 17B2's
26B2VPK stacking kit for two 13B2's. Harnesses, stacking boom and hardware included.

- ▶ One year warranty backed by our 40 years of antenna experience.
- ▶ Cushcraft antennas are designed to survive 80 mph (129 kph) winds unless otherwise noted.
- ▶ For safe antenna installations, avoid contact with powerlines.
- ▶ The use of lightning arresters is highly recommended.
- ▶ Stainless steel hardware and high grade seamless 6063-T832 tubing used in all antennas.
- ▶ Support mast, feedline and RF chokes are not included with antennas.
- ▶ Specifications are subject to change without notice.
- ▶ All Cushcraft antennas are available through dealers worldwide.

BOOMER STACKING INFORMATION

Antenna	2x617-6B	2x13B2	4x13B2	2x17B2	4x17B2
Forward Gain, dBi	17.0	18.8	21.8	21.0	24.0
Front/Back Ratio	30	24	24	24	24
E-Plane Beamwidth, deg	2x17.5	2x18	2x9	2x14.5	2x7.3
H-Plane Beamwidth, deg	2x10	2x9.5	2x9.5	2x7.5	2x7.5
Vert, ft	26	9.2	9.2	11.5	11.5
(m)	7.92	2.8	2.8	3.5	3.5
Horiz, ft	-	-	9.6	-	12
(m)	-	-	3.0	-	3.7
Approximate Wt, lb	62	22	44	32.5	115
(kg)	28.12	10.00	20.00	14.8	52.3

CENTAUR ELECTRONICS

High Performance Baluns

- State-of-the Art • 0.5-50MHz performance with advanced toroidal transformer • 3KW SSB rated • Extended performance in hostile environments • Stainless steel hardware • Heavy-duty body materials • Military grade internal components • 3" x 7"



- B11W10-50** for 1:1 Dipole..... \$49⁹⁵
B11Y10-50 for 1:1 YAGI..... \$49⁹⁵
B41Y10-50 for 4:1 YAGI..... \$64⁹⁵
B41LW10-50 4:1, ladderline to coax... \$64⁹⁵

The "Cricket" Pulser

CP-1 No more tuning-up key-down, creating heat and loading down the power supply! This user controlled, variable duty cycle station tuning instrument plugs into the station's exciter CW key jack. Proceed to tune-up in the usual manner, but then press the PULSE button on the CP-1 and adjust the duty-cycle control for a desired pulse width, normally about 10%. For best results the use of a peak-reading wattmeter is recommended. Uses 9-volt battery. 4 1/2" x 2 1/2" x 1 1/2"..... \$67⁹⁵



AMERITRON

Remote Controlled Switches

RCS-4 Select up to 4 different HF antennas while using just one coaxial feed line, and no additional control cable is required. The weatherproof switch box locates out on the tower, mast or other remote location. The control box locates at your operating position and switches antennas with a control voltage routed directly through the coaxial cable. 1.8-30MHz, 2KW..... \$129⁹⁵



RCS-8V Independently or simultaneously select up to 5 different antennas using just one coaxial feedline and 8-wire control cable. Internal wiring allows user to ground or float unused terminals as required. 5KW below 30MHz, and 1KW up to 150MHz... \$139⁹⁵



BW Coaxial Switches



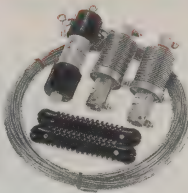
- 52/75Ω • 2KW SSB • -60dB Isolation • <1.2:1 @150MHz
CSR-5G (right) Single pole, 5-positions. All unused positions are automatically grounded. Side SO-239 connectors. Desk, wall, panel mount..... \$51⁹⁵
CS-6G Single pole, 6-positions. All unused positions are automatically grounded. SO-239 connectors. \$51⁹⁵



UNADILLA

W2AUW2VS 5-Band

Antenna Kit \$85⁹⁵
 Provides Low SWR on 80 & 40M and resonant performance on 10, 15 & 20M. Includes 40M traps, W2AU 1:1 balun, end insulators, 120 ft. of #14 stranded copper wire & instructions. 110 ft. long, rated 2KW PEP.



REYCO W2VS Antenna Traps

Add these traps to your dipole for multiband operation on two to six bands. For example: add the 40 meter pair (KW-40) and get 40 and 80 meter operation. For 10, 15, 20, 40, 80 and 160 meters, add all five pairs - 33 combinations! Selecting traps is easy. Just list the bands you want to cover, listing the highest frequency band first. You will need a pair of traps for each band except the one with the lowest frequency. Cost/pair.

- KW-80CW** 80m CW. \$48⁹⁵ **KW-17** 17 meters..... \$41⁹⁵
KW-80F 80m Phone \$48⁹⁵ **KW-15** 15 meters..... \$41⁹⁵
KW-40 40 meters..... \$42⁹⁵ **KW-12** 12 meters..... \$41⁹⁵
KW-30 30 meters..... \$42⁹⁵ **KW-10** 10 meters..... \$41⁹⁵
KW-20 20 meters..... \$41⁹⁵



W2AU Ferrite Baluns

Smooth transition from unbalanced coaxial transmission line to balanced antennas such as dipoles, quadrants & yagis. Produces proper current distribution resulting in reduced feedline radiation for maximum power transfer, gain & reduced TVI/BCI. Replaces center insulator, DC grounded for lightning protection and has a convenient center eye hook for support. Usable from 1.8 to 40MHz, 2KW PEP.

1:1 or 4:1 ratio or 1:1 Beam Balun..... ea. \$24⁹⁵

W2DU Non-Transformer Choke Baluns

A high efficiency, transformerless 1:1 balun. The HF model is the only one available that works on 160 meters! They all handle a VSWR up to 5:1 at the legal power limit, allowing use with antenna tuners. The VHF model eliminates the usual rod and tube hardware balun assembly normally used at those frequencies. Order model **HF** for 1.8 to 30MHz, **VHF** for 30 to 250MHz or **Beam Balun** for 40 to 10M.....ea. \$26⁹⁵

WA1FFL



Ladder Loc® Center Insulator & Support Provides a convenient means of attaching 450Ω ladderline to various dipole antennas. This sturdy support minimizes feedline flexing at the antenna feedpoint and ensures a long lasting, trouble-free installation. A top attachment point is provided for attaching a center support rope. UV stabilized for long life..... \$12⁹⁵

Van Gorden Engineering

Hi-Q Balun \$14⁹⁵

- 1:1 or 4:1 impedance ratio for matching unbalanced coaxial cable to balanced antennas.
- For dipoles, yagis, inverted vees & doublets • Weatherproof
- Covers 3 to 40MHz, 1.5kW rating
- Replaces center insulator
- Reduces feedline radiation for more power into antenna, and less TVI & BCI problems.
- Built-in DC ground reduces noise and protects against lightning.
- SO-239 connector, center support eye hook.



Hi-Q Antenna Center Insulator \$6⁹⁵

- Insulator only, no balun
- Replaces egg-type center insulator
- Small, rugged, lightweight, weatherproof, SO-239 connector, center supporting eye hook.



Antenna End End insulators..... each \$4⁹⁵

Dog Bone Antenna insulators..... each 95¢



Dipole Antennas: Complete with Hi-Q 1:1 balun, #14 stranded copper antenna wire, plastic insulators, and 100 ft. of nylon rope. Rated for full legal power. May be used in an inverted-V configuration.

- D-80** 80/75m, 130 ft. \$32⁹⁵ **D-15** 15m, 22 ft. \$27⁹⁵
D-40 40/15m, 66 ft. \$29⁹⁵ **D-10** 10m, 16 ft. \$26⁹⁵
D-20 20m, 33 ft. \$28⁹⁵

Shortened Dipoles: Construction is the same, and includes traps as shown above.

- SD-80** 75/80m, 90 ft. \$36⁹⁵ **SD-40** 40m, 45 ft. \$34⁹⁵



All-Bander Dipole Antenna Covers 160-10M using an antenna tuner with balanced output. Flat 135 ft. long (or less, as an inverted V or sloper). Trim to fit small lots. Assembled, with #14 gauge copper wire, center & end insulators and 100 ft. of 450Ω balanced line. 2KW PEP..... \$29⁹⁵
SHORTY All-Bander As above, but with loading coils to shorten the length to 70 ft. overall..... \$44⁹⁵

Van Gorden ultiband Antenna

- G5RV** Covers 3.5-30MHz, +1.8 MHz as a Marconi-type antenna with a tuner. Consists of a 102 ft. flat top with a 31 ft. long section of 300Ω KW twinlead, a transformer/coupler & 70 ft. of RG-8X coax & connector. 2KW PEP, assembled.. \$50⁹⁵
G5RV Jr 10-30MHz 17 ft. twinlead..... \$24⁹⁵
G5RV-E 3.5-30MHz, 102 ft., 31 ft. twinlead..... \$28⁹⁵
G5RV-M 1.8-30MHz, 204ft., 65 ft. twinlead..... \$50⁹⁵



- Van Gorden Ladder Line**
 100 ft., 18 ga. 450 Ω insulated ladder line \$12⁹⁵
 100 ft., 14 ga. 450 Ω insulated ladder line \$24⁹⁵
 1000 ft. 18 ga. 450 Ω insulated ladder line \$199⁹⁵
 1000 ft. 14a. 450 Ω insulated ladder line \$99⁹⁵

- Van Gorden White Nylon Rope**
NR-100 100 ft. roll, antenna guy rope \$4⁹⁵
NR-1000 1000 ft. roll, antenna guy rope \$44⁹⁵

Special "N" Connector
 Male connector for Belden 9913 & 8214 coax..... \$4⁹⁵

VanGorden Ready-Made Coax Assemblies
 6 to 100 ft. lengths of RG-8X or RG-213 with Silver-Plated-Teflon PL-259 connectors..... See Price List

INTERNATIONAL ANTENNAS Double Bazooka Antennas



Double Bazooka 1/2-wave antennas are constructed with a flat-top of 50Ω coax and a section of open-wire line at each end. The shield is split in the middle, but the center conductor and insulation are left intact. The feedline connects to the split shield which becomes the radiating element. This results in extremely quiet, broadband operation with 98% efficiency and a 50Ω feedpoint that feeds directly without a balun. Mounts horizontally or as an inverted V with low SWR across the entire band. Handles the legal RF power limit. Weatherproof center insulator with coax connector. The 80 meter version will operate efficiently on all bands with the addition of an antenna tuner.

- IAC-80M** Bazooka, 3.5 MHz (75-80M), 121 ft. \$135⁹⁵
IAC-40M Bazooka, 7 MHz (40M), 64 ft. long..... \$115⁹⁵
IAC-160M Bazooka, (160M), 248 ft. long..... \$195⁹⁵

On the WEB: www.iacantennas.com

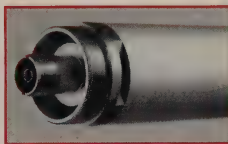
DIAMOND ANTENNAS

The Standard By Which All Others Are Judged.

Acclaimed as the technological leader in single & multiband antennas

- Wide-band Performance • Factory Adjusted—No Tuning Required • Highest Gain
- UPS Shippable • High Wind Rating • Fiberglass Radome • DC Grounded • Stainless Hardware

X500HNA Ruggedized Base/Repeater Antenna



COAX CONNECTION
AT BASE END



HEAVY DUTY BASE/
RADIAL ASSEMBLY



STRONG JOINT
COUPLINGS

X50NA

The New X50NA is an excellent choice where ruggedness is required in a medium-gain, dual-band, base/repeater application.

Features

- Wide frequency bandwidth
- Heavy duty fiberglass radome
- Stainless steel mounting hardware and radials
- Type-N Cable connection
- Compact size for easy mounting/installation

Specifications:

Freq.: 2m: 144–148MHz
70cm: 440–450MHz
Gain: 2m: 4.5dB; 70cm: 7.2 dB
Power: 200 watts
Wind Rating: 135 MPH (no ice)
Height: 5.6 feet

X500HNA

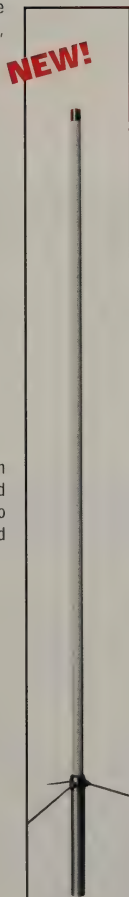
Diamond Antenna's best base station repeater antenna. Designed for strength and performance, the X500HNA is pretuned to achieve maximum gain in both the 2m and 70cm amateur bands.

Features

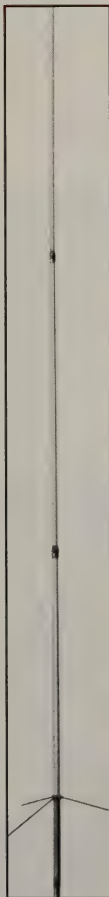
- Heavy duty fiberglass radome
- Overlapping outer shells for added strength
- Stainless steel mounting hardware and radials
- Strong—waterproof joint couplings
- Type-N Cable connection
- Wide band performance

Specifications:

Freq.: 2m: 144–148MHz
70cm: 440–450MHz
Gain: 2m: 8.3dB; 70cm: 11.7 dB
Power: 200 watts
Wind Rating: 90 MPH (no ice)
Height: 17.8 feet



X50NA



X500HNA

DIAMOND Mono-Band Base/Repeater Antennas

MODEL	BAND (MHz)	GAIN (dB)	WATTS	CONN.	HT. FT.	RATED WIND MPH (No. Ice)
DPGH62 ¹	50	6.0	200	UHF	21.0	78
F22A	144	6.7	200	UHF	10.5	112
F23A	144	7.8	200	UHF	15.0	90
F142A	222	5.5	200	UHF	6.0	110
F718A ²	440	11.5	250	N	15.0	90
F1230A	1240	13.5	100	N	10.5	90

DIAMOND Dual-Band Base/Repeater Antennas

MODEL	BAND (MHz)	GAIN (dB)	WATTS	CONN.	HT. FT.	RATED WIND MPH (No. Ice)
X50A	144/440	4.5/7.2	200	UHF	5.6	135
X50NA	144/440	4.5/7.2	200	N	5.6	135
X200A	144/440	6.0/8.0	200	UHF	8.3	112
X300A	144/440	6.5/9.0	200	UHF	10.2	112
X510NA ³	144/440	8.3/11.7	200	N	17.2	90
X510MA	144/440	8.3/11.7	200	UHF	17.2	90
X500HNA	144/440	8.3/11.7	200	N	17.8	90+
X700HNA	144/440	9.3/13.0	200	N	24.0	90
X2200A	144/222	6.0/7.8	150	UHF	11.5	112
U200A	440/1240	8.3/11.7	100	N	5.9	135

DIAMOND Tri-Band Base/Repeater Antennas

MODEL	BAND (MHz)	GAIN (dB)	WATTS	CONN.	HT. FT.	RATED WIND MPH (No. Ice)
U5000A	144/440/1240	4.5/8.3/11.7	100	N	5.9	135
V2000A ^{1,4}	50/144/440	2.1/6.2/8.4	150	UHF	8.3	110
X3200A ⁵	146/222/440	6.0/7.8/8.0	100/200	UHF	10.5	112
X6000A	144/440/1240	6.5/9.0/10.0	100/60	N	10.5	112

Most requirement: 1.4"–2.4".

¹ Heavy duty aluminum construction. (adjustable 50–54MHz)

² F-718A: 440–450MHz, F-718L: 430–440MHz, F-718L: 420–430MHz.

³ X510NU: 144–147/430–440MHz.

⁴ 1/4", rated in dBi.

⁵ 2m: 146–148

BAND: 144–144.148MHz, 222–222.225MHz, 420–420.430MHz, 430–430.440MHz, 440–440.450MHz, 1240–1240.1300MHz.

DIAMOND'S STATE-OF-THE-ART

VHF/UHF Mobile Antennas-
 Maximum Performance Without Compromise

You've seen the rest...now own the BEST!



SG7200NMO SG7500A SG7500NMO SG2000 SG2000HD SG7900A NR72BNMO NR73BNMO NR2C NR770HA NR770HB NR770HNM NR770HBNMO CR627B CR627BNMO CR320A

SPECIAL FEATURES:

- Factory pre-tuned/no adjustment
- Highest Performance antennas
- NMO and UHF (PO) base styles
- 24 Kt gold plated connector pin
- No grounding required unless noted
- Fold-over feature on most models



FOLD-OVER

Patented One-Touch Fold-over Feature
 (Not available on NR72BNMO, NR73BNMO,
 & NR770SA.)

MODEL	BAND (MHz)	GAIN (dB)	WATTS	CONN.	HT. IN.	ELEMENT PHASING
NR72BNMO ⁶	2m/70cm	2.15	100	NMO	13.8	1/4λ, 1/2λ
NR73BNMO	2m/70cm	2.15/5.3	100	NMO	33.5	1/2λ, 1-5/8λ
NR770SA ⁶	2m/70cm	2.15/2.15	100	UHF	16.9	1/4λ, 1/2λ
NR770HA ⁷	2m/70cm	3.0/5.5	200	UHF	40.2	1/2λ, 2-5/8λ
NR770HNM ⁸	2m/70cm	3.0/5.5	200	NMO	38.2	1/2λ, 2-5/8λ
NR770RA	2m/70cm	3.0/5.5	200	UHF	38.6	1/2λ, 2-5/8λ
NR790A*	2m/70cm	4.5/7.2	120	UHF	57.5	6/8λ, 3-5/8λ
SG7000 ⁶	2m/70cm	2.15/3.8	100	UHF	18.5	1/4λ, 6/8λ
SG7200NMO	2m/70cm	3.2/5.7	150	NMO	36.6	1/2λ, 2-5/8λ
SG7500A	2m/70cm	3.5/6.0	150	UHF	40.6	1/2λ, 2-5/8λ
SG7500NMO	2m/70cm	3.5/6.0	150	NMO	41.0	1/2λ, 2-5/8λ
SG7900A*	2m/70cm	5.0/7.6	150	UHF	62.2	7/8λ, 3-5/8λ
SG9600	6m/2m/70cm	-2.15/5.2	60	UHF	33	1/4λ, 1/2λ, 2-5/8λ

1/4λ, rated in dBi.

MODEL	BAND (MHz)	GAIN (dB)	WATTS	CONN.	HT. IN.	ELEMENT PHASING
NR2C	2m	4.1	150	UHF	55.5	1/2λ+1/4λ
SG2000*	2m	5.2	150	UHF	62.6	1/2λ+3/8λ
SG2000HD*	2m	5.2	250	UHF	62.6	1/2λ+3/8λ
SG6000NMO ⁹	6m	2.1	150	NMO	39	1/4λ
NR140A	1-1/4m	3.8	100	UHF	36.2	5/8λ
NR124	23cm	8.4	100	N	25	4-5/8λ
CR2145 ⁶	2m/1-1/4m	2.15/3.4	120	UHF	37	1/2λ, 5/8λ
CR224A* ⁶	2m/1-1/4m	5.0/6.0	150	UHF	68.5	7/8λ, 2-5/8λ
CR320A* ⁶	2m/1-1/4m	2.15/3.8/5.5	200	UHF	37.4	1/4λ, 1/2λ, 2-5/8λ
CR627B* ^{6,9}	6m/2m/70cm	2.1/4.5/5.5	120	UHF	60	1/4λ, 1/2+1/4λ/2-5/8λ
CR627BNMO* ^{6,9}	70cm	5.5	100/200	NMO		
NR2000NA	2m/70cm	3.15/6.3/9.7	100	N	39	1/2λ, 2-5/8λ, 5-5/8λ

* Not recommended for Magnet Mount

⁶ Grounding required.

⁷ NR770HB same specifications but in black finish.



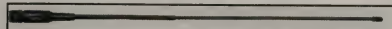

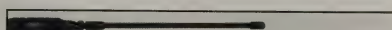
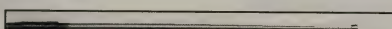
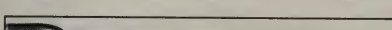
⁸ NR770HBNMO same specifications but in black finish.

⁹ 50 MHz antennas adjustable

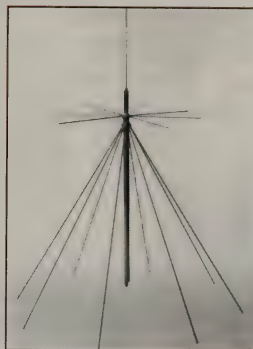
High Efficiency HT & Scanner Antennas HF/VHF Multiband Mobile Antenna Low SWR Coax Switches & Dummy Load

RH Series

High quality, high gain HT antennas for mono, dual, and tri-band handheld radios. Available in both BNC and SMA connections. Increase the performance on your handheld or wideband scanner with a Diamond RH Series antenna.

RH3		SRH805		SMA	NEW!
RH77CA					
RH951S					NEW!
RH707					
RH205					
SRH519 & SRH815				SMA	NEW!

MODEL	DESCRIPTION	RELATIVE GAIN
D130J	Wideband discone 25-1300 MHz. 200 W transmit 50-1300 MHz. No cable.	N/A
RH3	2m/70cm dual band "Black Bullet" HT antenna. 1.75" BNC. 120 to 900 receive	-2 dB
RH77CA	High gain 2m/70cm dual band HT antenna. Receive range to 900 MHz. BNC.	+6 dB
RH205	2m HT antenna, telescopic, 5/8λ fully extended, 47.5"; 1/4λ retracted, 9"	+9 dB
RH519	2m/70cm slim dual-band HT antenna. Flexible. 8" BNC, 10 watts.	+3 dB
RH707	2m/70cm dual-band tiltable whip - HT antenna. 8 1/4" BNC.	+3 dB
RH951S	High gain 2m/70cm/23cm slim tri-band HT antenna. Flexible. BNC (Wide band receive)	+6 dB
SRH519	2m/70cm dual-band HT antenna. Flexible. 8" SMA, 10 watts.	+3 dB
SRH805	2m/70cm/23cm tri-band HT antenna. 1.75" SMA, 10 watts.	-2 dB
SRH815	2m/70cm/23cm tri-band HT antenna. Flexible. 6" SMA, 10 watts.	+3dB



D130J

Super Discone Antenna

The D130J Super Discone Antenna is an ultra-wide-band antenna covering amateur radio, air traffic control and other utility bands. Rust-free stainless steel is employed in major component parts.

Description

- Ultra-wideband design 25 to 1300 MHz receive.
- Transmit on 2m, 1 1/4m, 70 cm, 33 cm and 23 cm amateur bands. 100-1300 MHz broad band.
- Compact and lightweight design enables the antenna to be installed on balcony railing at an apartment or condominium.
- The D130J can be made further compact and lightweight by removing the top loading coil if 25-50 MHz is not required.

Specification

Frequency range	25 to 1300 MHz receive 100 to 1300 MHz transmit
Length	1.7m (66.9")
Weight	1kg (2.2 lbs.)
Max. length	0.41 m (16.1")
Mast diameter	25 to 52mm (.098 to 2.05") with supplied mounting brackets 200 w, 100-1300 MHz
Max. Power	

NEW

DIAMOND MV3A MOBILE ANTENNA SYSTEM

For the new HF/VHF transceivers.

OPTIONAL LOADING COILS

HVC7	40m
HVC14	20m
HVC18	17m
HVC21	15m

Recommended Antenna Mounts: K400 or K600M

MX62M Duplexer

Specifications:
 HF/6m & 2m bands
 1.6-56 MHz LPF
 76-470 MHz HPF
 (76-120 receive only)
 Watts: 600 P.E.P.
 Loss: .2 dB LPF
 .3 dB HPF
 Iso.: 50 dB

MV3A has 4 band capability -2m, 6m, plus two HF bands through use of loading coils.
Bands Supplied: 10m/6m/2m
Opt. Loading Coils: 40m/20m/17m/15m
Power, P.E.P.: HF 120w/VHF 200w
Mount Connection: UHF
Length: 57"
SWR: 1.5:1 nominal

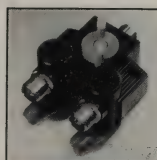


MX62M

Popular HF/VHF Mobile Transceivers; i.e. IC706, etc. (Or combine your 2m & HF)



DL30A



**CX210A
 CX210N**



CX310A

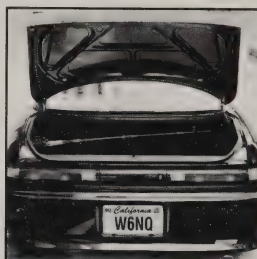
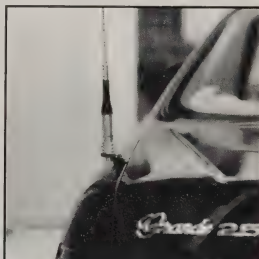
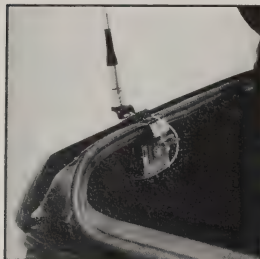
MODEL	DESCRIPTION
CX210A	Heavy duty wideband coax switch, DC-1000 MHz. 1.5 kW, SO-239
CX210N	Heavy duty wideband coax switch, DC-1500 MHz. 1.5 kW, Type N
CX310A	Heavy duty wideband coax switch, 3 position, DC-800MHz, SO-239
DL30A	Dummy load, DC-500 MHz. 15w average/100w peak. PL-259

DIAMOND'S Premium Antenna Mounts & Cable Assemblies

Designed for today's high performance antennas

DIAMOND'S Hide-away Antenna Mount

As easy as 1, 2, 3— the K601 Hide-Away Mount folds antenna safely into the trunk. Fully adjustable, fits most vehicles.



K601 HIDE-AWAY TRUCK MOUNT

Color: Black. Choice of NMO or UHF base.
Recommended antennas:

NR73BNMO, NR770HNMO, NR770HA
NR770HBNMO, NR770HB, NR770RA,
SG7200NMO, SG7500A & SG7500NMO.

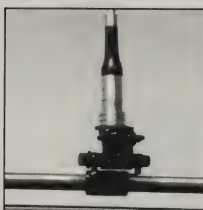
K601M—UHF Base K601NMO—NMO Base
C110 10' extension cable for front radio installations.



K600 Variable Angle Trunk Mount

Deluxe aerodynamic trunk mount.
Vertical adjustment range 0-9%.
Four set screw, stainless steel mount assembly.

K600M SO-239 base, 16.5' coax & PL-259
K600P SO-239 base, 16.5' coax & type N



K550 Luggage Rack Mount

Adjustable luggage rack mount for new mini vans.

K550KM SO-239 base, 16.5' coax & PL-259
K550 Mount Only



K702M

Magnet Mount Base

Deluxe low profile magnet mount with high holding power. Aerodynamic styling, large 6 3/8" diameter, 3/4" height. For VHF/UHF antennas up to 50" height. Includes thin mylar protective sheet to enhance grip and protection of paint. Cable: 13' RG58A/U & PL-259.

K400 Hatchback/Door Truck Lid Mount

Diamond's deluxe heavy duty mount. Two-axis adjustable. Recommended for high gain VHF/UHF antennas.

K400C* SO-239 base, 6.5' coax & PL-259
K400CNMO* NMO base, 6.5' coax & PL-259
K400N Type-N base, 13.5' coax & Type N

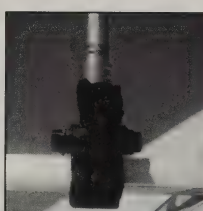
* Use C110 for front radio installations



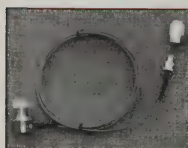
K540 Mirror/Luggage Rack Mount

Adjustable Mirror/Luggage rack mount accepts 1/2" to 7/8" tubing. Fits most mirrors and utility racks.

K540KM SO-239 base, 16.5' coax & PL-259
K540 Mount Only



C-SERIES CABLE ASSEMBLIES



C101

SO-239 base, 6.5' RG316 Teflon coax & PL-259. Ideal cable assembly for trunk mount/remote head installations.

C101NMO

Same as C101 with NMO base. For Diamond's K-Series mounts only.

C213

Same as C101 with 13.5' cable assembly.



C110

Extension cable for C101. 10' RG8X coax w/mini UHF connectors. Use C110 to extend cable to 16.5' for most front radio installations.

C110BNC

10' assembly similar to above, uses RG316 Teflon coax terminating in BNC-male.



C211

SO-239 base, 16.5' cable assembly & PL-259. Combination of C101 & C110.

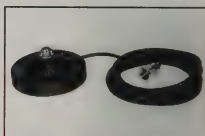
K400-3/8 C Special Trunk Mount for 3/8 x 24 Thread Antennas

Ideal mount for Outbacker Perth, OB Jr., and other medium weight antennas.

Note: Use C110, 10ft extension for front radio installation

Adjustment: 2 axis
Power: 350 watts RMS
500 w P.E.P.
Cable 6 1/2' RG316 Teflon coax w/PL-259

Spring recommended for stiff/heavy antennas



SPM35

Magnet Mount Base

Heavy duty 2.2 lb./4" magnet mount rated 25-500 MHz. Recommended for antennas under 45".

Motorized Mount SWR/Power Meters & Duplexers/Triplexers



K9000 Motorized Mount

Raise and lower your antenna with a touch of the button with Diamond's New K9000 motorized mount.

- K9000TM for trunk & hatchback installations.
- K9000LRM for luggage rack installations.
- Accepts "Ground Independent" Antennas up to 45" Length.
- 0-9° Range. Operates from 12VDC.
- Compatible with Diamond C-Series Base/cable assemblies.
- Recommended Antennas: SG7200NMO, SG7500NMO, NR73BNMO, SG7500A & NR770 Series.

SWR/POWER METERS

Diamond Antenna Meters measure forward & reflected power and SWR. Illuminated meter, sensor switch and LED indicator. Power ratings listed below are for intermittent operations. SX600 and SX1000 are designed with 2 sensors for multiradio operation. 12 VDC @ 50 mA is required for displays. 6" w x 2" h x 4" d, 2 lbs.



SX-1000 4-Band

Freq. MHz: 1.8-160/430-450/800-930
/1240-1300
Power Ranges: 5/20/200W
Connectors: HF-VHF SO-239 UHF TYPE - N



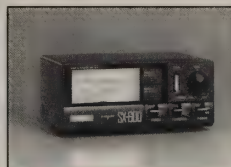
SX-100

Freq. MHz: 1.6-60
Power Ranges: 30/300/3KW
Connectors: SO-239
Min. Power SWR Test: 20W



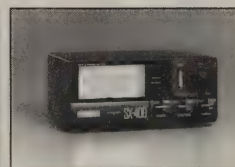
SX-200

Freq. MHz: 1.8-200
Power Ranges: 5/20/200W
Connectors: SO-239
Min. Power SWR Test: 4W



SX-600 dual band

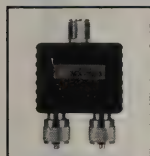
Freq. MHz: 1.8-160/140-525
Power Ranges: 5/20/200W
Connectors: SO-239
Min. Power SWR Test: 4W



SX-400

Freq. MHz: 140-525
Power Ranges: 5/20/200W
Connectors: SO-239
Min. Power SWR Test: 4W

Duplexers/Triplexers



MX-72D



MX-72H/N



MX-214



MX3000D



MX62M

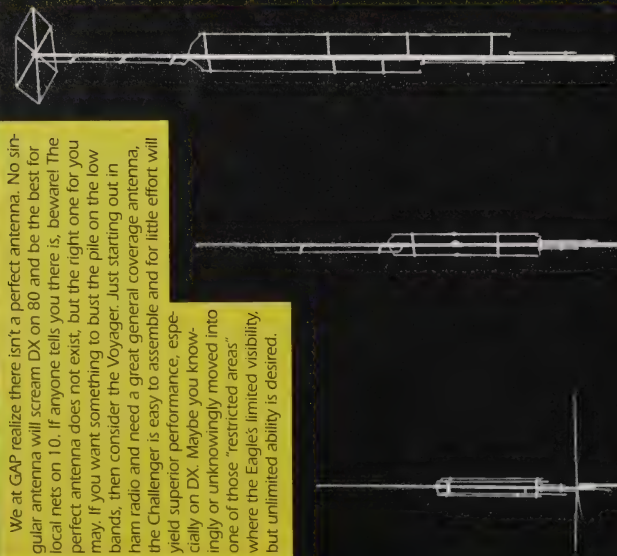


MX324

MODEL	MX37	MX72D	MX72H	MX72N	MX214	MX214D	MX324	MX324D	MX2000	MX2000D	MX3000	MX3000N	MX3000D	MX62M
FREQUENCY BAND (MHz)	1.6-470 900-1300	LPF 1.6-30	140-150	HPF 400-460	140-150 220-225		LPF BPF HPF 1.5-150 220-225 400-550		LPF BPF HPF 1.6-60 110-170 300-950		LPF BPF HPF 1.6-160 350-500 850-1300		LPF BPF HPF 1.6-56 76-470	
PWR CW (ICAS) WATTS P.E.P.	100/50 200/100	400 1000	150 400	100 250	150/100 300/200		800 600 500		800 800 500		400 200 100 800 400 200		600 600	
THRU LOSS/dB	0.25/0.45	0.15	0.15	0.25	0.3/0.4		0.3 0.4 0.4		0.15 0.2 0.25		0.2 0.3 0.4		0.2 0.3	
ISOL	45dB		60dB		45dB		40-50dB		60dB		55dB		50dB	
VSWR	1.2:1		1.2:1		1.2:1		1.2:1		1.2:1		1.2:1		1.2:1	
CONNECTOR COMPLEMENT	<div><div>(N)</div><div>MIX 430 1200</div><div>(M) (N)</div></div>	<div><div>(N)</div><div>MIX 144 430</div><div>(M) (M)</div></div>	<div><div>(N)</div><div>MIX 144 430</div><div>(M) (M)</div></div>	<div><div>(N)</div><div>MIX 144 430</div><div>(M) (N)</div></div>	<div><div>(N)</div><div>MIX 144 220</div><div>(M) (M)</div></div>	<div><div>(N)</div><div>MIX 144 220</div><div>(M) (M)</div></div>	<div><div>(N)</div><div>MIX 144 220 430</div><div>144 220 430 (M) (M) (M) (M)</div></div>	<div><div>(N)</div><div>MIX 50 144 430</div><div>50 144 430 (M) (M) (M) (M)</div></div>	<div><div>(N)</div><div>MIX 50 144 430</div><div>50 144 430 (M) (M) (M) (M)</div></div>	<div><div>(N)</div><div>MIX 144 430 1200</div><div>(M) (M) (M) (M)</div></div>	<div><div>(N)</div><div>MIX 144 430 1200</div><div>(M) (M) (M) (M)</div></div>	<div><div>(N)</div><div>MIX 144 430 1200</div><div>(M) (M) (M) (M)</div></div>	<div><div>(N)</div><div>MIX 144 430 1200</div><div>(M) (M) (M) (M)</div></div>	<div><div>(N)</div><div>MIX HF/6M 22M</div><div>(M) (M)</div></div>
CONNECTOR	12" Cable w/ Connectors	Direct	12" Cable w/Connectors		12" Cable w/Connectors	Direct	12" Cable w/Connectors	Direct	12" Cable w/Connectors	Direct	12" Cable w/Connectors	Direct	12" Cable w/Connectors	

GAP: THE PERFECT ANTENNA

We at GAP realize there isn't a perfect antenna. No singular antenna will scream DX on 80 and be the best for local nets on 10. If anyone tells you there is, beware! The perfect antenna does not exist, but the right one for you may. If you want something to bust the pile on the low bands, then consider the Voyager. Just starting out in ham radio and need a great general coverage antenna, the Challenger is easy to assemble and for little effort will yield superior performance, especially on DX. Maybe you knowingly or unknowingly moved into one of those "restricted areas" where the Eagle's limited visibility but unlimited ability is desired.



Eagle DX

Challenger DX

Voyager DX

This chart helps you select the right GAP antenna. When comparing GAPs, bandwidth is not a concern. With few exceptions, a GAP yields continuous coverage under 2:1 for the **ENTIRE BAND**.

All antennas utilize a GAP elevated asymmetric feed. A major benefit is the virtual elimination of the earth loss, so more RF radiates into the air instead of the ground. This feed is why a GAP requires **NO RADIALS**. Just as elevating a GAP offers no significant improvement to its performance, adding radials won't either, making set up a breeze.

A **GAP antenna has no traps, coils or transformers**. This is important. The greatest sources of failure in multiband antennas are these devices. Perhaps you heard someone discuss a trap that had melted, arced or became full of water. Improvements to these inherent problems are the focus of the antenna manufacturer, while the basic design of the antenna remains unchanged. **GAP improved the trap by eliminating it!** Removing these devices means they don't have to be tuned and, more importantly, won't be detuned by the first ice or rain. The absence of these devices improves antenna reliability, stability and increases bandwidth.

Another major advantage to a GAP antenna is its NO tune feature. Screws are simply inserted into predrilled holes with a supplied nutdriver.

The secret is out and people in the know say:

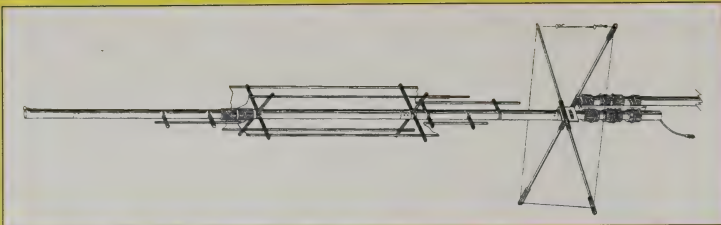
CO—"The GAP consistently outperformed base-fed antennas...and was quieter."

73—"This is a real DX antenna, much quieter than other verticals."

RF—"To say this antenna is effective would be a real understatement. Switching back and forth on 40m between another multiband HF vertical and the GAP, there was no comparison. Signals were always stronger on the GAP, sometimes by 5 units, not just DBs."

Worldradio—"These guys have solved the problem associated with verticals. That is, an awful lot of RF is wallowing around and dropping into the dirt instead of going outward bound. A half-wave vertical does need radials if it is end fed (at the bottom). But the same half-wave vertical does not (as much, hardly at all) if it is fed in the center."

IEEE—"Near field and power density analyses show another advantage of this antenna (asymmetric vertical dipole): it decreases the power density close to the ground, and so avoids power dissipation in the soil below it. The input impedance is very stable and almost independent of ground conductivity. This antenna can operate with high radiation efficiency in the MF AM standard broadcast band, without the classical buried ground plane, so as to yield easier installation and maintenance."

New Release: **TITAN DX**

This all purpose antenna is designed to operate 10m-80m, WARC bands included. It sits on a 1-1/4" pipe and can be mounted close to the ground or up on a roof. Its bandwidth and no tune feature make it an ideal antenna for the limited space environment as well as a terrific addition to the antenna farm.

MODEL	BANDS OF OPERATION										HT	WT	MOUNT	COUNTER-POISE	COST
	2m	6m	10m	12m	15m	17m	20m	30m	40m	80m					
Challenger DX	■	■	■	■	■	■	■	■	■	■	31.5'	21 lbs	Drop In Ground Mount	3 Wires @ 25'	
Eagle DX	■	■	■	■	■	■	■	■	■	■	21.5'	19 lbs	1-1/4" pipe	80" Rigid	
Titan DX	■	■	■	■	■	■	■	■	■	■	25'	25 lbs	1-1/4" pipe	80" Rigid	
Voyager DX	■	■	■	■	■	■	■	■	■	■	45'	39 lbs	Hinged Base	3 Wires @ 57'	

Just released



VHF and UHF Fixed Station Vertical Antennas

Model G6-270R Dual-band Base Antenna for 2 Meter and 440 MHz.

Created from the same design as the G7 and G6 series. Rugged and Solid fiberglass construction. Optimum Gain and Wide Bandwidth. Consists of 5/8 λ over 5/8 λ on 2M and 4 x 5/8 λ on 440 MHz.

- Length: 7ft. 6 in.
- Weight: 5.3 lbs.
- Wind Survival: 100 mph.
- Mounting: 1-1/4" - 1-1/2" mast
- Max Power: 100 watts
- Gain: 6dB VHF & UHF
- Bandwidth: 1.5:1 SWR
2 MHz. - 2 Meters
10 MHz. - 440 MHz.
- Feed: Shunt, DC ground
- Connector: N female



Model G6-440 Omnidirectional Fixed Station

Each is pre-tuned at the factory for easy installation. Enclosed in a lightweight tapered fiberglass radome for low wind resistance. Compact size allows shipment via U.P.S. or Parcel Post.

ELECTRICAL

- Maximum power input: 250 watts
- Gain: 6 dB
- Bandwidth: 8 MHz. under 1.5:1 SWR
- Impedance: 50 ohm nominal
- Lightning protection: direct ground
- Termination: Type N female

MECHANICAL

- Length: 87"
- Weight: 5 lbs.
- Wind survival: 125 mph.
- Mounting: up to 2" mast



G6-144B Two Meter Antenna Omnidirectional Fixed Station

6dB GAIN - compared to 1/2 wave dipole.

Get the tremendous advantage of 6 dB gain transmitting, 6 dB gain receiving. Whether your application is for individual fixed station or repeater operation the Hustler G6-144B has superior mechanical and electrical design. Optimum gain is achieved with two 5/8 wave-length radiators correctly phased in collinear configuration. Stated gain figure is conservative and maximum signal radiation is at an extremely low angle.

ELECTRICAL

- 6 dB gain over 1/2-wave dipole
- Omnidirectional radiation pattern
- Maximum radiation - extremely low angle
- 50 ohm feed impedance
- Field adjustable: 140-150 MHz.
- SWR at resonance: 1.2:1 at antenna
- Bandwidth : 4 MHz. under 2:1 VSWR
- Shunt-fed with D.C. grounding

MECHANICAL

- Vertical element: 117" long, 1-1/8" telescopic to 3/8"
- Constructed of high strength aluminum
- Connector: SO-239
- Wind load: 26 lbs. @ 100 mph.
- Completely self-supporting
- Mounting: Vertical support up to 1-3/4"
- Shipping wt: 6.8 lbs.



G7-144 Two Meter Antenna Omnidirectional Fixed Station

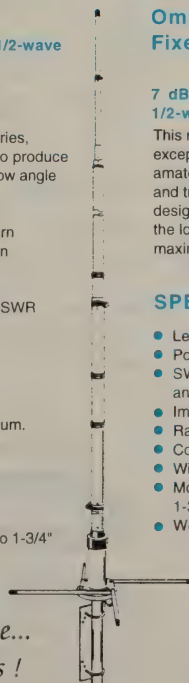
7 dB GAIN - compared to 1/2-wave dipole.

ELECTRICAL

- Radiator: Collinear shunt-fed. Triple 5/8-wave elements in series, separated by 2 phasing coils to produce maximum gain and extremely low angle of radiation.
- 7 dB gain over 1/2-wave dipole
- Omnidirectional radiation pattern
- Extremely low angle of radiation
- Tuning range: 144-148 MHz.
- VSWR: 1.2:1 at resonance
- Bandwidth: 4 MHz. under 2:1 VSWR
- Power: 600 watts
- 50 ohm feed impedance
- Shunt fed with DC grounding

MECHANICAL

- High strength fiberglass and alum.
- Completely self-supporting
- Length: 184"
- Radials: (4) 20-1/4" x 3/8" O.D.
- Connector: N-type
- Wind load: 26 lbs. @ 100mph.
- Mounting: Vertical support up to 1-3/4"
- Weight: 10 lbs.



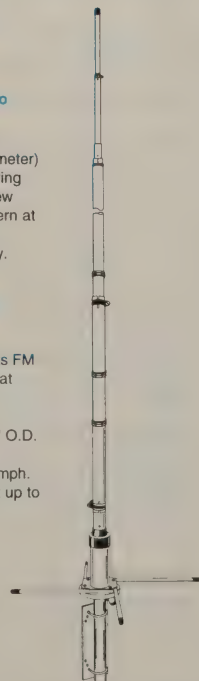
G7-220 Omnidirectional Fixed Station

7 dB GAIN - compared to 1/2-wave dipole.

This rugged antenna means exceptional 220 MHz (1-1/4 meter) amateur performance, receiving and transmitting. A unique new design keeps the signal pattern at the lowest possible angle of maximum radiation efficiency.

SPECIFICATIONS

- Length: 122" long
- Power capability: 600 watts FM
- SWR at resonance: 1.2:1 at antenna
- Impedance: 50 ohms
- Radials: (4) 14-3/4 x 3/16" O.D.
- Connector: Type N
- Wind load: 26 lbs. @ 100 mph.
- Mounting: vertical support up to 1-3/4" O.D.
- Weight: 7 lbs.



*Reliability & Performance...
Beyond your Expectations !*



VHF and UHF Mobile Antennas

Collinear

Model CGT-220

5.2 dB Gain 5/8" Over 1/4" Collinear Trunk-Lip Mount Antenna

- 1.1:1 SWR (typical) at resonance • 4 MHz. bandwidth under 1.5:1 SWR • Power rating: 200 watts FM • Height: 4' 9" including mount
- Spin knob to remove antenna
- 17' of low loss coax with connector



Model CG-220

Has identical electrical characteristics as CGT-220 but with 3/8" x 24 threaded base

Model CGT-144

5.2 dB Gain, 5/8" Over 1/4" Collinear Trunk-Lip Mount Antenna

- 6 MHz bandwidth • 1.5:1 SWR • Power rating: 200 watts FM • Length: 7' 1" including mount • 180° swivel ball for vertical positioning • 17' coax with connector • No drilling required

Model CG-144

Same as CGT-144 but has 3/8" x 24 threaded base

Stainless Steel Mounts

- Exceptional performance and quality
- 180° adjustable reinforced stainless ball
- Professional quality Cycloc bases for greatest mechanical stability
- Exclusive "C" backup plate allows external installation
- Supplied with all mounting hardware and cork pad
- Applicable with all Hustler and other 3/8" x 24 thread antennas



SSM-1 Professional Ball Mount and Spring

SSM-2 Ball Mount

SSM-3 Stainless Steel Spring with Coupling Stud

Quick Disconnect

QD-2 100% Stainless Steel

Remove antenna from mount in seconds with push and twist release. Every part including the compression spring is manufactured from the best available 100% stainless steel. Special design of enclosed compression and lock assembly assures freedom against ice and dirt jam up. Accommodates small, medium and large size mobile antennas. Equipped with 3/8" x 24 threads, female one end and male on the other.



Professional Series Heavy Chrome

Model C-32

Hustler professional ball mount. Furnished complete with rubber pad, steel backup plate, all mounting hardware, and hex wrench.



Model C-29

Stainless steel, corrosion resistant and electropolished spring complete with 3/8" x 24 coupling stud.

Model C-30

Chrome-plated steel spring complete with 3/8" x 24 coupling stud.

RX Series

- 3.4 dB Gain; 5/8" Over 1/4" 100 watt rating
- 15 feet of coax with PL-259 connector
- Magnetic mount holds to 75 mph.

Model RX-2

2 meter, black and chrome

Model RX-220

220 MHz. black and chrome

Model RX-440



FX Series

- 3.4 dB gain; 5/8" Over 1/4" 200 watt rating
- 15 feet of coax with PL-259 connector
- Magnetic mount holds to 100 mph.

Model FX-2

2 meter, black and chrome

Model FX-220

220 MHz., black and chrome

Model FX-2B

2 meter, all black

Model FX-220B

220 MHz. all black



Unity Gain

Model THF

VHF/UHF Trunk-Lip Mount Antenna

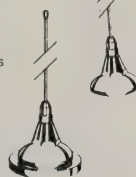
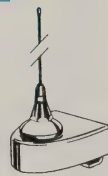
Model UHT-1

VHF/UHF Roof/Deck Mount Antenna

Model UGM

VHF/UHF Magnetic Mount Antenna

Extend range of handheld or portable radios. Trimmable 17-7 PH stainless steel radiator is cut to 1/4 wavelength for low SWR and unity gain from 140 to 500 MHz. Trim chart included. Highly efficient mylar-protected magnetic mount attaches conveniently to magnetic compatible surfaces. No drilling! Supplied ready for operation with 7' of mini-coax with BNC connector.



Resonator Spring RSS-2

Finest quality stainless steel spring for use between resonator and Hustler antenna mast. This 3/4" x 3 x 1/2" spring absorbs shock when antenna strikes overhanging obstructions. Supplied ready for easy installation with 3/8" x 24 threads, female on one end, male on the other.



MBM "Super" Magnet

- 95 lb. pull strength
- Powerful 5 inch dia. magnet
- 16 feet RG 58 coax with PL-259 connector
- 3/8" x 24 female threads
- Recommended for antennas up to 48" in length

Model

BBLT-144A

3.4 dB Gain Trunk-Lip Mount Antenna

- Adjustable 143-149 MHz.
- SWR: 1.1:1 at resonance
- Power rating: 200 watts FM
- Shunt-fed • Reduced static
- Length: 44" inc. mt. • Spring and 180° swivel ball for vertical positioning • 17' coax with connector • No drilling required



BBL-144A

3.4 dB Gain Roof Mount Antenna

Same as BBLT-144A but mounts in 3/4" hole on a flat surface. 17' coax with connectors.

Model

SF-2

Low Cost 3.4 dB Gain 2 meter 5/8" Over 1/4" for 3/8" x 24 thread mounts

- 1.2:1 SWR at resonance
- Power rating: 100 watts FM
- Tapered stainless radiator
- Length: 4'



Model

SF-220

Low Cost 3.4 dB Gain 220 MHz 5/8" Over 1/4" for 3/8" x 24 thread mounts



Model

MKR-2 Radial Kit

Contains three decoupling radials and mount to convert series-fed mobile VHF antennas to fixed operation. Performance is comparable to many regular base antennas. Suitable for permanent installations or portable use. Heavy zinc plated mast bracket and hardware. Accepts antennas with standard 3/8" x 24 threaded base.

Bumper Mount BM-1

Design is rugged for supporting Hustler antenna with Standard or Super resonators. Heavy stainless steel strap, stronger than chain, fits most bumpers inconspicuously. Assembly is easily installed and held rigid by "J" bolts at the top and bumper strap clamp at bottom.

Mount includes 180° adjustable swivel ball for vertical positioning of antenna. Hardware is zinc plated for superior resistance against corrosion.



Multi-band Adapter VP-1

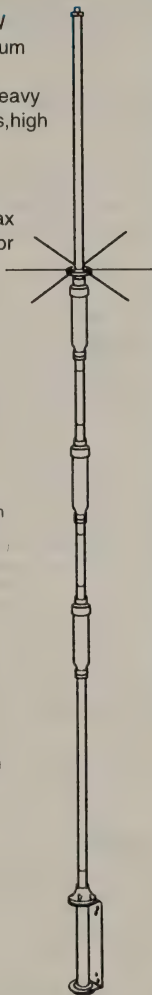
Automatic bandswitching using any three Hustler H.F. mobile resonators. Adapts with any Hustler H.F. mast (MO-1, MO-2, MO-3, MO-4) for tri-band operation easily and quickly.





Fixed Station Multi-Band HF Vertical Antennas

- Broadbanded - low VSWR at band edges
- Power capability - full legal limit on SSB or CW
- Solid one-inch fiberglass trap forms for optimum electrical and mechanical stability
- Heavy wall, high strength aluminum tubing, heavy duty aluminum mounting bracket and low loss, high strength insulators
- Stainless steel clamps and hardware
- Easy assembly and tuning
- Single line feed with any length of 50 ohm coax
- Use as ground mount with or without radials, or elevated mount with radials



Model 6-BTV

- Bands** 10-15-20-30-40 & 75 or 80 meters
- Length/weight** 24'16.5 lbs.
- Mounting** Vertical support up to 1-3/4" O.D.
- Wind load** 29 lbs. @ 70 mph.
- Power capability** Full legal limit SSB/CW
- VSWR at resonance** 1.15 to 1 or better
- Bandwidth** VSWR 2:1 or better at band edges on 10-40 meters (100 KHz. on 75 or 80 meters)

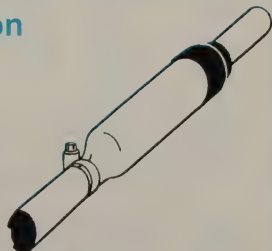
Model 5-BTV

- Bands** 10-15-20-40 & 75 or 80 meters
- Length/weight** 25'1" /17 lbs.
- Mounting** Vertical support up to 1-3/4" O.D.
- Wind load** 29 lbs. @ 70 mph.
- Power capability** Full legal limit SSB/CW
- VSWR at resonance** 1.15 to 1 or better
- Bandwidth** VSWR 2:1 or better at band edges on 10-40 meters (100 KHz. on 75 or 80 Meters)

Model 4-BTV

- Bands** 10-15-20-40 meters
- Length/weight** 21'5" /15 lbs.
- Mounting** Vertical support up to 1-3/4" O.D.
- Power capability** Full legal limit SSB/CW
- VSWR at resonance** 1.15 to 1 or better
- Bandwidth** VSWR 1.6:1 at band edges

30 Meter Add-on Kit for 4-BTV and 5-BTV



- Model 30-MTK**
- Full 30 meter band coverage
- Will not affect normal operation
- Easy installation
- All hardware included
- Weight: 5 lbs.

Hustler Resonators

Standard Resonators

Power rating - 400 watts SSB

Part	Description	Approx. Bandwidth 2:1 SWR or Better
RM-10	10 METER	150-250 KHz.
RM-11	11 METER	150-250 KHz.
RM-12	12 METER	90-120 KHz.
RM-15	15 METER	100-150 KHz.
RM-17	17 METER	150 KHz.
RM-20	20 METER	80-100 KHz.
RM-30	30 METER	50-60 KHz.
RM-40	40 METER	40-50 KHz.
RM-75	75 METER	25-30 KHz.
RM-80	80 METER	25-30 KHz.

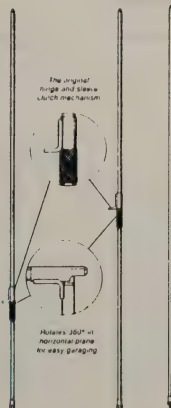
Super Resonators

Power rating - full legal limit. Super Resonators also offer wider bandwidth, especially on 40, 75 and 80 meters.

Part	Description	Approx. Bandwidth 2:1 SWR or Better
RM-10-S	10 METER	250-400 KHz.
RM-11-S	11 METER	250-400 KHz.
RM-15-S	15 METER	150-200 KHz.
RM-20-S	20 METER	100-150 KHz.
RM-40-S	40 METER	50-80 KHz.
RM-75-S	75 METER	50-60 KHz.
RM-80-S	80 METER	50-60 KHz.



Mobile HF Antennas Hustler Masts



MO-1 Mobile mast, 54" high, for deck or fender mounting - folds over 15" above base.

MO-2 Mobile mast, 54" high, for bumper mounting - folds over 27" above base.

MO-3 Mobile mast, 54" high, solid - does not fold over.

MO-4 HF Mobile Mast

- For use with Hustler HF resonators
- Only 22" long
- Suitable for trunk or deck mounting
- Includes 3 new tip rods



MO-4

*Reliability & Performance...
Beyond Your Expectations!*

TRIBANDERS

The KT-34A and KT-34XA have become pace-setters for tribander performance. The four element KT-34A offers an unusually compact solution for a three-band high performance installation. The six element KT-34XA has been designed to outperform all commercially available tribanders and many monobanders as well. The high performance of these tribanders results from their innovative construction. Traps, coils, and capacitors found on conventional tribanders are replaced by lossless linear loading and high-Q air capacitors constructed of aluminum tubing. These techniques coupled with KLM's unique dual-driven element system allow broadband performance with high gain and low VSWR remaining nearly constant across the three bands. The KT-34A can be upgraded to the KT-34XA at any time.

The boom length of the KT-34XA is doubled, when one tri-resonant and one full size 10 meter element is added. These changes increase the gain to 11-11.3 dBd on 10M, 9-9.5 dBd on 15M, and 8.5-9 dBd on 20M.

Structurally, the KT-34A is built tough. All the aluminum, including the boom, is strong weather resistant 6063-T832 alloy. All the hardware is stainless steel except for the mounting U-bolts. Virtually indestructible Lexan insulators support the elements and insulate them from the boom. Rotation is possible by most any ham rotor. Wind balance and wind survival are excellent.

KT-34A



KT-34XA



SPECIFICATIONS

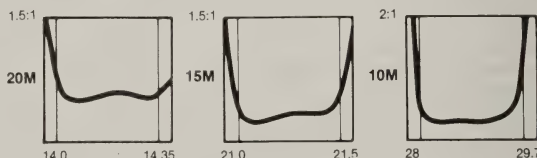
ELECTRICAL

BANDWIDTH 14.0-14.350 MHz
21.0-21.450 MHz
28-29.7 MHz
GAIN 7 dBd \pm 0.3 dB
VSWR 1.5:1
F/B-F/S 20 dB/30 dB
FEED IMP 50 Ohms w/Balun
BALUN 4:1, 5 kW PEP

MECHANICAL

ELEMENT LENGTH 24 ft.
BOOM LENGTH 16 ft.
TURN RADIUS 16 ft.
WINDLOAD 6 sq. ft.
WEIGHT 45 lbs.
MAST 2 in. O.D.

KT34A vs. SWR



SPECIFICATIONS

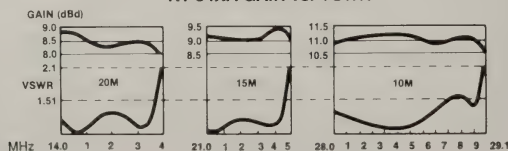
ELECTRICAL

BANDWIDTH 14.0-14.350 MHz
21.0-21.450 MHz
28-29.7 MHz
GAIN 8.5-9 dB
9-9.5 dB
11-11.3 dB
VSWR 1.5:1
F/B-F/S 20 dB/40 dB
FEED IMP 50 Ohms w/Balun
BALUN 4:1, 5 kW PEP

MECHANICAL

ELEMENT LENGTH 24 ft.
BOOM LENGTH 32 ft.
TURN RADIUS 21.5 ft.
WINDLOAD 9 sq. ft.
WEIGHT 68 lbs.
MAST 2 in. O.D.

KT-34XA GAIN vs. VSWR



VHF/UHF ANTENNAS

2 METER YAGIS

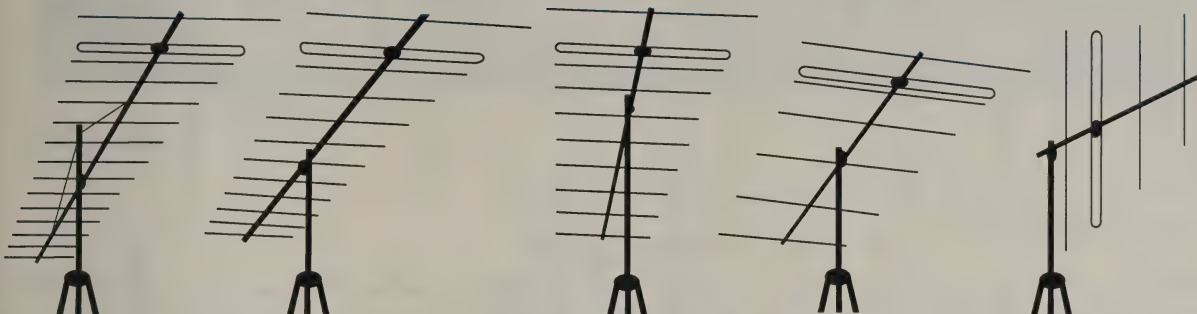
2M-15X

2M-12X

2M-10X

2M-7X

2M-4X



2 METERS

2M-20 LBX

2M-15X

2M-12X

2M-10 X

2M-7X

2M-4 X

ELECTRICAL:						
BANDWIDTH	SPEC. 144-146 USABLE 143-148 144-15.5 dBd	144-148 MHz	144-148 MHz	144-148 MHz	144-148 MHz	144-148 MHz
GAIN	145-15.5 dBd 146-15.4 dBd 147-15.3 dBd 148-13.7 dB	14.8 dBd	13.4 dBd	12.5 dBd	10.3 dBd	8.5 dBd
VSWR.....Less than	1.5:1	1.5:1	1.5:1	1.5:1	1.5:1	1.5:1
.....Greater than	30 dB	30 dB	25 dB	25 dB	25 dB	20 dB
BEAMWIDTH	E=26°, H=28°	E=26°, H=29°	E=28°, H=33°	E=32°, H=36°	E=46°, H=50°	62°
FEED IMP	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms
FEED ALUN	4:1, 2 kW Coax	4:1, 2 kW Coax	4:1, 2 kW Coax	4:1, 2 kW Coax	4:1, 2 kW Coax	4:1, 2 kW Coax
MECHANICAL:						
ELEMENT LENGTH	40 5/8 in.	40 5/8 in.	40 5/8 in.	40 5/8 in.	40 5/8 in.	40 5/8 in.
BOOM LENGTH	38.5 ft.	28 ft.	21 ft.	15 ft.	8 ft. 9 in.	4.2 ft.
TURN RADIUS	21 ft. 10 in.	15 ft. 5 in.	13 ft.	8 ft. 9 in.	5 ft.	4 ft.
WINDLOAD	2.19 sq. ft.	1.75 sq. ft.	1.6 sq. ft.	1.38 sq. ft.	.65 sq. ft.	.25 sq. ft.
WEIGHT	17 lbs.	11 lbs.	9 lbs.	6 lbs.	4 lbs.	2 lbs.
FAST	2 in.	1 1/2 in. or 2 in.	1 1/2 in. or 2 in.	1 1/2 in. or 2 in.	1 1/2 in. or 2 in.	1 1/2 in. max.

440-16X

440-10X

440-6X

1.2-15LBX

1.2-24LBX



440 MHz

432 MHz

1296 MHz

440-16X

440-10X

440-6X

432-30 LBX

432-20 LBX

1.2-44 LBX

1.2-24 LBX

1.2-15 LBX

ELECTRICAL:							
BANDWIDTH	420-450 MHz	420-470 MHz	420-470 MHz	430-440 MHz	425-440 MHz	1260-1300 MHz	1260-1300 MHz
AIN	14.0 dBd	11.5 dBd	8.9 dBd	17.3 dBd	15.3 dBd	18.2 dBd	16.2 dBd
SWR.....Less than	1.5:1	1.5:1	1.5:1	1.5:1	1.5:1	1.5:1	1.5:1
.....Greater than	20 dB	20 dB	20 dB	20 dB	20 dB	39 dB	39 dB
FEED IMPEDANCE	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms
FEED ALUN	Coax "N" 4:1, 2 kW	Coax "N" 4:1, 2 kW	Coax "N" 4:1, 2 kW	1:1 Sleeve, 2 kW	1:1 Sleeve, 2 kW	4:1 Rigid Coax	4:1 Rigid Coax
BEAMWIDTH	E=28°, H=32°	48°	60°			E=16°, H=18°	E=22°, H=24°
MECHANICAL:							
ELEMENT LENGTH	14 in. max.	14 in. max.	14 in. max.	14 in. max.	14 in. max.	4.5 in.	4.5 in.
BOOM LENGTH	10 ft. 3 in.	4.75 ft.	28 in.	21 ft. 11 in. (9.6 wavelength)	12 ft. 4 in. (5.42 wavelength)	12 ft. 4 in.	75 3/4 in.
TURN RADIUS	6 ft.	4.90 ft.	2 ft. 5 in.	12 ft. 4 in.	7 ft.	84 in.	38 in.
WINDLOAD	0.74 sq. ft.	0.53 sq. ft.	0.2 sq. ft.	1.72 sq. ft.	0.9 sq. ft.	1 sq. ft.	1/4 sq. ft.
WEIGHT	7.5 lbs.	4 lbs.	1.2 lbs.	9 lbs.	5 lbs.	10 lbs.	7 lbs.
FAST	1 1/2 in.	1 1/2 in.	1/12 in.	2 1/8 in. max.	1 1/2 in.	2 in. O.D.	up to 2 in. O.D.
COUNT	Center	Rear	Rear	Center	Center	Center	Rear

ELECTRICAL:

	2M-14C	2M-22C	435-18C	435-40CX
BANDWIDTH	144-150 MHz	144-150 MHz	420-450 MHz	420-450 MHz
GAIN	11 dBc	13 dBc	12 dBc	15.2 dBc
VSWR	Less than 1.5:1	1.5:1	1.5:1	1.5:1
F/B	Greater than 20 dB	20 dB	20 dB	20 dB
FEED IMP	50 Ohms	50 Ohms	50 Ohms	50 Ohms
BEAMWIDTH	38°	34°	34°	25°
ELLIPTICITY	3 dB max	3 dB max	3 dB max	3 dB max
BALUN	(2) 4:1 coax, 2 kW*	(2) 4:1 Coax, 2 kW*	(2) 4:1 Coax, 2 kW*	(2) 4:1 Coax, 2 kW*

MECHANICAL:

ELEMENT LENGTH	40.625 in. max	40.625 in. max	13.25 in. max	13.625 in. max
BOOM LENGTH	12 ft. 9 in.	19 ft. 1 in.	7 ft. 4 in.	14 ft. 7 in.
TURN RADIUS	7 ft.	11 ft.	7 ft.	8 ft. 9 in.
WINDLOAD	1.25 sq. ft.	1.85 sq. ft.	0.5 sq. ft.	1.16 sq. ft.
WEIGHT	7.5 lbs.	11 lbs.	4.5 lbs.	10 lbs.
MAST	2 in.	2 in.	1.5 in.	1.5 in.
MOUNT	Center	Center	Rear	Center
POLARITY	Circular R.H. and L.H. switchable using CS-3Circular R.H. and L.H. switchable using CS-2			

*Derate to 250W when using Switchers (supplied)



435-40CX

HF LOG PERIODICS

KLM's Log Periodic Antennas offer extended coverage of the amateur bands and intermediate frequencies. The **10-30-7LPA** for example, covers 20, 15, and 10 Meters plus the WARC bands and many MARS frequencies. The addition of the **40M-1** dipole module provides 40 Meter operation as well. This can easily be accomplished using the **SK-8** Conversion Kit. This system is also available complete as the **7.2/10-30-LPA**. All HF Log Periodic Antennas are available with a Heavy Duty Boom at additional cost. Also, 10kW Baluns are available for a nominal charge.

ELECTRICAL:

	10-30-7LPA	7.2/10-30LPA	6-30-15LPA
BANDWIDTH	10-30 MHz	7.2/10-30 MHz	6-30 MHz
GAIN	7 dBd typ	3/7 dBd typ	5.5 to 8 dBd
VSWR	1.5:1 typ	1.5:1 typ	2:1 and less, typ
F/B	15 dB	10/15 dB	15 dB typ
FEED IMP	50 Ohms, unbal.	50 Ohms, unbal.	50 Ohms, unbal.
BALUN(S)	4:1, 5 kW	4:1, 5 kW	(3) 4:1, 4 kW PEP

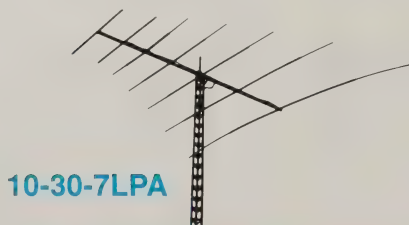
MECHANICAL:

ELEMENTS	7	8	1.5
ELEMENT LENGTH	43 ft.	46 ft.	48 ft.
BOOM LENGTH	30 ft.	42 ft.	46 ft. (6-12-8)
TURN RADIUS	26 ft.	32 ft.	30 ft. (10-30-7)
WINDLOAD	8.25 sq. ft.	12 sq. ft.	24 sq. ft.
WEIGHT	70 lbs.	100 lbs.	150 lbs. (6-12-80) / 70 lbs. (10-30-7)
MAST	2 in.	2 in.	2 in./3 in.

SK-8 Conversion Kit

This kit enables you to add 40 Meters to your **KLM 10-30-7LPA** antenna. The **SK8** kit includes a boom extension, a beta match for the dipole and all the necessary hardware including a full set of instructions. Purchase a **KLM 40M Dipole** to finish the upgrade.

By upgrading your present **10-30-7LPA** to include **40M** you will enjoy increased Front-to-Back on 20M and will see Front-to-Back gain on 40M similar to a 2 element beam. You will also enjoy forward gain on 40 Meters through the interaction of the full log array. It's an easy way to upgrade your log.



10-30-7LPA



7.2/10-30LPA



6-30-15LPA

MFI ENTERPRISES, INC.

1786 Super Hi-Q Loop™

A remotely tuned high-Q antenna. Only 36 inches in diameter, the smallest high efficiency 10 to 30 MHz antenna made for Ham radio. It does not need a ground, radials, counterpoise or antenna tuner and handles 150W. Vertical mounting gives both low angle radiation for excellent DX and high angle radiation for close-in local contacts. Mounts horizontally for omni-directional coverage. No control cable needed, the coax feedline carries both RF power and tuning control signals.

The included **Super Remote Control** makes the Super Hi-Q Loop™ easy to tune. Exclusive Automatic Band Selection™ auto-tunes the MFI-1786 to the desired band. Two-range Cross-Needle SWR/Wattmeter is built-in. Uses 8 "D" batteries (not included), totally portable. 110V AC power supply is included...\$269⁹⁵



CYA-240 Dual Band 2M/70cm Antenna

A dual-band yagi antenna for 2 meters and 70cm. The unique design places 5 UHF elements in front of 3 VHF elements on a 5 ft. 3 in. boom. Keeping each yagi separate from each other provides the absolute best radiation pattern.

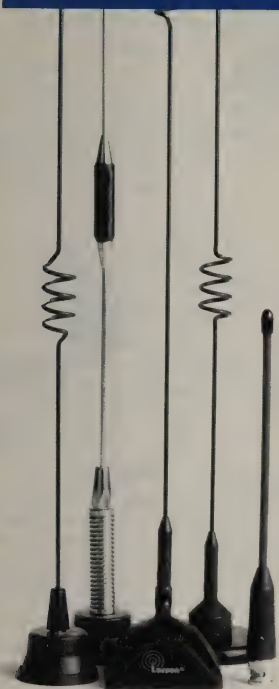
Gain is 7.4 dBd on 144-148MHz and 9.5dBd on 440-450MHz with a front to back ratio of 18dB. A power divider is included.

High-grade aluminum and stainless steel hardware compliments the design and makes the CYA-240 a rugged performer. Wing nuts are used to hold the elements in place, making quick and portable use easy.

Designed for vertical or horizontal polarization, maximum power is 300W SSB, and 150W FM. It's perfect for packet stations, emergency use, or to simply direct more output power to your contact station while reducing receive interference. Accepts masts 1.25 to 2.5 inches. Weighs 4 lbs. 7oz...\$99⁹⁵



Quality Performance... You Can Hear



Simultaneous VHF and UHF Communication Over Wide Bandwidths

Larsen's Dual Band Series

Larsen dual band antennas provide excellent performance for simultaneous use of VHF and UHF amateur frequencies. Each Larsen dual band antenna is factory preset to guarantee optimum performance with no tuning required.

NMO 2/70 SH	NMO 2/70	NMO 2/70 B	KD3 2/70
Freq. 144-148/442-450 MHz	144-148/442-450 MHz	144-148/442-450 MHz	144-148/442-448 MHz
Gain Unity	Unity	Unity	Unity
Power 100 Watts	100 Watts	100 Watts	25 Watts
Type VHF: Center Loaded 1/4 λ UHF: Center Loaded 3/4 λ	VHF: Center Loaded 1/4 λ UHF: Center Loaded 3/4 λ	VHF: Center Loaded 1/4 λ UHF: Center Loaded 3/4 λ	VHF: Loaded 1/4 λ UHF: 1/4 λ
Base NMO UHF BASE B w/ spr	3" Round mag. mount	NMO UHF BASE B	TNC
Height 17"	17"	18"	8"
Whip W NMO 2/70 SH	W NMO 2/70 B	W NMO 2/70 B	N/A

λ = wave length

KD4 2/70	NMO 2/70 C	NMO 2/70 B	KG 2/70 UD PL
Freq. 144-148/442-448 MHz	144-148/442-450 MHz	144-148/442-450 MHz	144-148/442-448 MHz
Gain Unity	2.4/4 dB	2.4/4 dB	2.4/4.5 dB*
Power 25 Watts	100 Watts	100 Watts	50 Watts
Type VHF: Loaded 1/4 λ UHF: 1/4 λ	VHF: 5/8 Wave UHF: Collinear	VHF: 5/8 Wave UHF: Collinear	VHF: 1/2 λ UHF: 1/4 λ, Helical
Base BNC	NMO 2/70 BCO	NMO 2/70 BCO	KG 2/70 D/S
Height 8"	36.75"	33.5"	32.5"
Whip N/A	W 2/70 B	W 2/70 B	W KG 2/70

λ = wave length *Ground plane required for gain.



Low Impedance Design Creates A Premium On-Glass Antenna

Larsen's Külglass® Series

Larsen's Külglass (KG) series uses a patented low impedance design and advanced materials to produce the world's best on-glass antenna. Our KG series uses advanced resin polymer plastic to completely enclose the circuit board or loading coil for mechanical durability and weather resistance. 3M's best adhesive tape, plus Larsen's unique bonding enhancer, ensure the best possible grip to the glass.

KG 144 UD PL	KG 220 UD PL	KG 440 UD PL
Freq. 144-148 MHz	220-225 MHz	440-460 MHz
Gain 2.4 dB	2.4 dB	2.4 dB
Power 100 Watts	100 Watts	100 Watts
Connector PL 259 (Loose)	PL 259 (Loose)	PL 259 (Loose)
Type 1/2 λ	1/2 λ	1/2 λ
Base KG 144 D/S	KG 220 D/S	KG 440 D/S
Height 48"	28.5"	15"
Whip W KG 144	W KG 220	W KG 440

λ = wave length

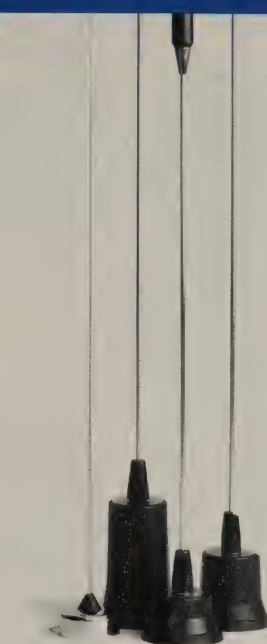
Outstanding Transmit Range and Durable Construction

Larsen's Kulduckie® Portable Series

Superior transmit range and tough mechanical durability are the hallmark of Larsen portables. All of our center cores are made of brass or copper plated steel to maximize RF emission. Fully soldered connections and silver plated components improve electrical efficiency. Our double spring BNCs also reduce wear on your radio mount. Other mounting styles available.

KD4 146	KD4 146 HQ (2m)	KD4 2M HW
Freq. 144-148 MHz	144-148 MHz	144-148 MHz
Gain Unity	Unity	Unity
Power 25 Watts	25 Watts	25 Watts
Type 1/4 λ, Helical	1/4 λ, Helical	1/2 λ, Telescoping
Base BNC	BNC	BNC
Height 8"	10.5"	8.5" to 42"
Whip N/A	N/A	W KD4 2M HW

λ = wave length



Proven Superior Performance and Rugged Dependability

NMO Mobile Antennas

Larsen's own version of the standard 3/4" Motorola TAD/TAE type mount uses advanced design, materials, and construction to provide a premium mount. For demanding outdoor applications, the chemical resistant NMO series is housed in a resin polymer plastic shell which is completely molded around the nickel plated brass whip stud to eliminate moisture damage. Our superseal gasket also greatly reduces water intrusion under the base.

NMO 27 C	NMO 150 C	NMO 150 SPEC	NMO 220 C	NMO 440 C
Freq. 27-31 MHz	144-174 MHz	150-152 MHz	220-225 MHz	440-460 MHz
Gain 3 dBd	Unity	Unity	Unity	4.5 dBd
Power 200 Watts	200 Watts	200 Watts	200 Watts	200 Watts
Type Loaded 1/4 λ	5/8 λ	1/4 λ	5/8 λ	5/8 over 1/2 λ
Base NMO 27 BCO	NMO 150 BCO	N/A	NMO 220 BCO	NMO UHF BASE B
Height 53"	51.75"	21"	34.5"	33"
Whip W 490	W 490	N/A	W 400	W 154

λ = wave length



Larsen Electronics, Inc.
3611 NE 112th Avenue, Vancouver, WA 98682
360 944-7551, Fax: 360 944-7556
E-mail: larsen@larsenet.com

Canadian Larsen Electronics, Ltd.
5049 Still Creek Ave., Burnaby, BC V5C 5V1
604 299-8517, Fax: 604 299-4191

pro-am[®] by Valor[®]

"The Clear Connection"™

Mounts and Accessories

160-6 Meters Mobile

PHF Series Antennas

Pro-Am's Monoband PHF Series consists of a black fiberglass lower section with integral coil and an adjustable (and removable) stainless steel whip (except for PHF160). These time-proven HF antennas are especially designed for maximum efficiency, low SWR, and broad bandwidth. They are power rated at 250 Watts P.E.P. and built to withstand considerable use. Standard 3/8 x 24 threads. Total assembled length on all models: 96". (Exception: PHF6: 58")

Model	Band	Band Width
PHF160	160 Meters	12 KHz
PHF75	75 Meters	36 KHz
PHF40	40 Meters	60 KHz
PHF30	30 Meters	100 KHz
PHF20	20 Meters	150 KHz
PHF17	17 Meters	175 KHz
PHF15	15 Meters	200 KHz
PHF12	12 Meters	300 KHz
PHF10	10 Meters	500 KHz
PHF6	6 Meters	1000 KHz

Micro-Mag™ 2 Meter and 70CM

MM270B

Dual Band MICRO-MAG™ Kit with 9' of RG174 Cable to BNC Connector. 1/4 Wave at 2m and 5/8 Wave at 70cm. Typical VSWR: Less than 1.5:1 through the band. Max. Power: 50 Watts on 2m and 25 Watts on 70CM.

Through-Glass 2 Meter and 70CM

GM270

Dual Band Through-The-Glass Antenna Kit featuring a 26" Copper Plated Whip with Black Finish and 14' of RG58 Cable to PL-259 Connector. Gain: 2.6dB over 1/4 wave at 2m & 4.0dB over 1/4 wave at 70cm. Typical VSWR: Less Than 2.0:1 through the bands.

Max. Power: 50 Watts. Field Tuneable.

Through Glass 2 Meter GM144

2M Through-The-Glass Antenna Kit featuring a 27-1/2" Copper Plated Whip with Black Finish and 14' of RG58 Cable to PL-259 Connector. Gain: 2.5dB over 1/4 wave. VSWR: 1.5:1 through the band. Max. Power: 50 Watts. Field Tuneable.

(NOTE: Some newer automobiles are equipped with "passivated glass" which does not permit on-glass antennas to work properly. Please check your owner's manual or your dealer.)

Hand-Held Antennas 144BNC

Electrical 1/4 Wave "Rubber Duck" with high performance in the VHF range of 144-148 MHz. 12" in length. Provided with BNC connector for quick disconnect.

450BNC

Full 1/4 Wave "Rubber Duck" with high performance in the UHF range of 430-470 MHz. 6-1/2" in length. Comes with BNC connector for quick disconnect.

Mag Mount Kit

VAA002

2 Meter Mag Mount Kit. 17-7 ph Stainless Steel Whip, 12' of Cable with PL-259 Connector. Can be cut for 220 or 450 MHz. Available in Chrome or Black Finish. (Please specify "B" after Model Number for Black)

VAA002BN

Same as VAA002 but with BNC Connector.

Dual Band Antenna

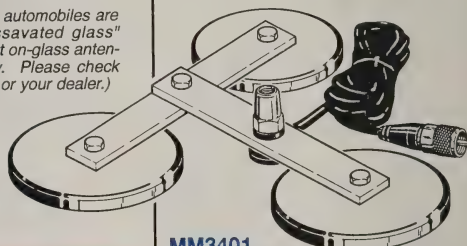
MO144-440

Dual Band Antenna to Cover it All! 19" Stainless Steel Whip. 1-1/8" Threads Match Pro-Am's Mounts and 3/4" Hole Motorola TAD/TAE Mounts. Great for all band scanners 25 MHz - 1.3 GHz. SWR: Less than 2:1. Gain: Unity on 2m and 2.1dB over 1/4 Wave on 70CM. Power FM: 150 Watts.



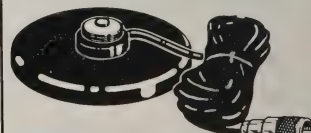
PAT2

Low Profile Trunk Mount includes 17' of RG58 Cable with PL-259 Connector. (Available in Black Finish: specify with a "B" suffix.)



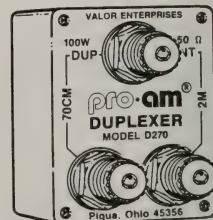
MM3401

Maxi-Magnet Mount Kit features three 5" (401) magnets properly spaced on a heavy duty aluminum frame. The MM3401 is pre-wired to Valor's patented wafer termination with 17' of RG58 coax and PL-259 connector. Accepts standard 3/8" x 24 antennas. Available with Black magnet cups: **MM3401B**.



PAM

3-3/4" Diameter Low Profile Magnet Mount Kit pre-wired with 12' of RG58 Cable to PL-259 Connector. (Available in Black or Chrome Plated; Add "B" suffix for Black)



D270

Duplexer for 2-Band Antennas. Provides cross-band operation with a 2m/70cm antenna. Power rated up to 100 Watts with 50 Ohm impedance. Size: 2.25" x 3" x 1".

Multi-Band Antenna System

AB5

Pro-Am's AB5 System consists of a 4" aluminum mast and tri-top adaptor with resonators for 10, 15, 20, 40, and 75 meters. Mast fits any standard 3/8 x 24 thread mount. The 10, 15, and 20 meter resonators cover SSB ranges without extra tuning. The interchangeable 40 and 75 meter resonators are easily tunable.

VHF Antenna

PHB144

2M, 3dB Gain VHF Antenna featuring a matching Low Loss Coil and moto style threads. VSWR: 1.5:1. Power: 100 Watts.



SOLARCON ANTENNAS **A99**

10M Base Antenna with Twin Ring Adjust-A-Match Tuning

The **A-99** is a voltage fed half wave variable mutual transfer inductance tuned antenna for 10 meters.

It's economical and easy to use! — the **SOLARCON** sealed base unit is tuned with external inductance rings. The impedance remains constant over the tuning range.

Simple Tuning! — raising the tuning rings raises the frequency and lowering the rings lowers the resonant frequency.

A real beauty! — rugged three-piece white fiberglass construction with triple plated brass fittings. It's easy to assemble and install.

The optional **GPK-1** Ground Plane Radial Kit makes it perform even better!

Specifications:

Height 17 ft. 8 in. Radiation Angle... <20°
Sections 3 Grounding ... DC Ground
Band 10 meters Mounting ... 1-1/2" mast
Gain 3 dBi Coaxial Cable 5252
Power Limit 2000W Connector SO-239

A-99 Price: \$64⁹⁵

GPK-1

Groundplane Kit

- 30% more power gain lowers angle of radiation for greater range.
- Kit includes 1 collar and 4 fiberglass radials.

\$39⁹⁵

TOP TRADES for your clean, late model SSB & FM Gear...

contact us for a quote today!

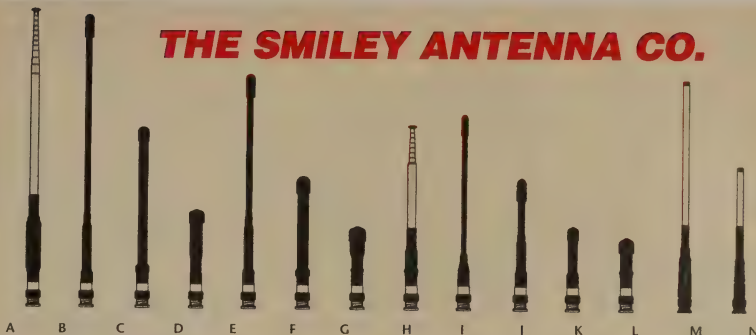
Toll Free:

1-800-558-0411

e-mail: help@aesham.com

Internet: www.aesham.com

THE SMILEY ANTENNA CO.



Hand Tuned Antennas for Hand Held Radios

Each Smiley handheld antenna is individually hand tuned to resonance at band center under normal operating conditions. (No ground plane — No radials). Manufactured from the finest heat-treated copper plated spring steel coils. Cold rubber compound is used for coil insulation and a neoprene heat-shrink coating applied for strength & endurance. All have BNC connectors.

THIN STICK 1/4-wave telescoping dual band antenna for 144 and 220MHz bands (TS) **\$16⁹⁵**

SUPER STICK II (A) 2M, 5/8-wave, flexible base loaded telescoping antenna. 6-9db gain fully extended. Usable fully collapsed, or one section 1/4 wave. Length: 54" extended, 10" collapsed..... (SS-II) **\$19⁹⁵**

SUPER STICK II COMBO As above, but includes a 2M Stubby Duck antenna (D) (SS-II/COMBO) **\$26⁹⁵**

5/8 SLIM DUCK (B) 2M, 5/8-wave, 7db gain, flexible base loaded antenna. 12" long (5/8 SLD-2) **\$17⁹⁵**

5/8 SLIM DUCK COMBO As above, includes a 2M meter Stubby Duck (D) .. (5/8 SLD-2 COMBO) **\$24⁹⁵**

REGULAR DUCK (C) For 2M. Tuned Ducks show a 3db gain over other Rubber Ducks because they are impedance matched for hand-helds..... (RD-2) **\$14⁹⁵**

STUBBY DUCK (D) Tuned, for 2M.....(RDS-2) **\$14⁹⁵**

SUPER STICK III A 220MHz 5/8-wave, flexible base loaded telescoping antenna. 6-9db gain extended; usable collapsed, or a one-section 1/4-wave. 36" extended, 8" collapsed (SS-III) **\$19⁹⁵**

SUPER STICK III/COMBO As above but includes a 220MHz Stubby Duck (G) (SS-III/COMBO) **\$26⁹⁵**

5/8 SLIM DUCK (E) 220MHz, 7db gain, flexible base loaded antenna. Length: 9" (5/8 SLD-220) **\$17⁹⁵**

5/8 SLIM DUCK COMBO As above, but includes a 220MHz Stubby Duck (G) .. (5/8 SLD-220 COMBO) **\$24⁹⁵**

REGULAR DUCK (F) 220MHz, tuned.....(RD-220) **\$14⁹⁵**

STUBBY DUCK (G) 220MHz, tuned.....(RDS-2) **\$14⁹⁵**

SUPER STICK IV (H) 440MHz 5/8-wave, flexible telescoping antenna. 6-9db gain extended; usable collapsed. 18" extended, 5 1/2" collapsed (SS-IV) **\$19⁹⁵**

SUPER STICK IV COMBO As above, but includes a 440MHz Stubby Duck (K) (SS-IV/COMBO) **\$26⁹⁵**

SLIMLINE (I) 440MHz, 1/4-wv. flex..... (SL-440) **\$12⁹⁵**

5/8 SLIM DUCK (J) 440MHz, 7db gain, flexible base loaded antenna. Length: 5" (5/8 SLD-440) **\$17⁹⁵**

5/8 SLIM DUCK COMBO As above, but includes a 440MHz Stubby Duck (K) .. (5/8 SLD-440 COMBO) **\$24⁹⁵**

STUBBY DUCK (K) 440MHz, tuned (RDS-440) **\$14⁹⁵**

MINI DUCK (L) 440MHz, tuned (RDM-440) **\$14⁹⁵**

FLEX-COIL (M) 2M, 1/2-wave, 7-9 dB gain, flexible base, 35" fully extended.....(FLX 1/2 WAV2M) **\$25⁹⁵**

270A (N) Telescoping 2m/440 gain antenna. 1/4-wave (2m) 5/8-wave (440 MHz) **\$19⁹⁵**

TAQ 1/4-wave whip antenna, specify for 2M, 220 or 440MHz **\$10⁹⁵**



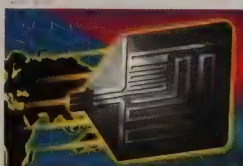
Arrow Antenna

Satellite using his Yaesu FT-530 Dual Band HT connected to an Arrow 146/437-10 antenna.

The FT-530 was operated in full duplex mode using the up-link frequency of 145.850 MHz and the 436.800 MHz down-link. The headphones allowed him to monitor the down-link at all times, even while transmitting.

The Arrow is designed specifically to allow portable Satellite operation using just an HT. This means engineering it to provide maximum gain and efficiency in the smallest practical size and weight.

The boom is constructed out of 3/4" square aluminum stock — 37 1/2" long with a big foam grip on the back end for easy holding. The 3 VHF & 7 UHF Gamma Matched elements with separate BNC connectors are regular aluminum arrow shafts which are strong and lightweight. Plastic tip for safety **146/437-10 \$73⁹⁵**



The Freedom Antenna A concealed-disguised antenna system that mounts on-glass, inside the vehicle. Uses an advanced, copper-etched serpentine array contour design. At .013" thick, its ultra-thin interior-mount design virtually disappears into your windshield. At only 3 3/8" square, its "stealth-like" finish blends totally into the glare band. Simply locate the recommended area on your windshield interior. Then, apply like a decal, route the cable and connect to your radio. No holes to drill, no magnet scratches, no suction cup smudges and no clips.

HVA-146 140-155 MHz — **\$69⁹⁵** • **HVA-460** 435-480 MHz — **\$69⁹⁵**

Coaxial Cable, Rotor, Antenna & Ground Wire

PolyPhaser® Lightning Protection CORPORATION

PolyPhaser's Impulse Suppressors feature a hermetically sealed voltage sensitive gas tube. Additional components and unique design provide No DC Continuity with low loss to assure that surge voltages and currents that form differentially on the coaxial cable are prevented from being shared by your valuable equipment. 10 year Warranty.

BROADBAND COAXIAL PROTECTORS



- Multi-strike capability with low strike throughput energy - aluminum enclosure.
- VSWR: ≤ 1.1 over its frequency range



FLANGE MOUNT (right)

IS-50UX-C0 Frequency Range: 1.5MHz to 400MHz. Max. Power: HF 2kW, VHF 375W, UHF 125W... **\$61⁹⁵**

IS-50UX-C1 Frequency Range: 50MHz to 700MHz. Maximum Power: VHF 375W, UHF 125W... **\$61⁹⁵**

IS-50NX-C2 Range: 125MHz to 1000MHz. Maximum Power: VHF 375W, UHF (low) 125W, 800MHz to 1 GHz 50W. Type-N connectors **\$61⁹⁵**

BULKHEAD MOUNT (left)

IS-B50LU-C0 Frequency Range: 1.5MHz to 400MHz. Max. Power: HF 2kW, VHF 375W, UHF 125W... **\$64⁹⁵**

IS-B50LU-C1 Frequency Range: 50MHz to 700MHz. Maximum Power: VHF 375W, UHF 125W... **\$64⁹⁵**

IS-B50LN-C2 Range: 125MHz to 1000MHz. Maximum Power: VHF 375W, UHF (low) 125W, 800MHz to 1 GHz 50W. Type-N connectors **\$64⁹⁵**



ROTOR CONTROL PROTECTOR

IS-RCT (left) Provides lightning protection for rotor controllers, motors, control box and other nearby equipment. EMP rated - faster than other gas tubes with lower turn-on voltage. Water tight enclosure with mounting stud. 7/16" h x 3/16" w x 2 1/2" d..... **\$54⁹⁵**

IN-LINE PHONE LINE PROTECTOR

IS-SPTL (right) Multi-stage protection, with large bandwidth and fast response time, EMP rated. For telephone trunk lines - handles standard ring voltages up to 105Vrms and surges up to 36kA **\$57⁹⁵**



POWER LINE EXTENSION PROTECTOR

In-line, multi-stage EMP rated protectors provide multi-strike power line protection, filtering and proper grounding when equipment use requires extension cord. Two outlets, master on/off switch, and a circuit breaker for added protection. All aluminum grounded enclosure, 4 1/4" wide.

IS-PLDO-120-15A 15 ft. cord, 120V @ 15A.... **\$172⁹⁵**

IS-PLDO-120-20A 6 ft. cord, 120V @ 20A.... **\$215⁹⁵**

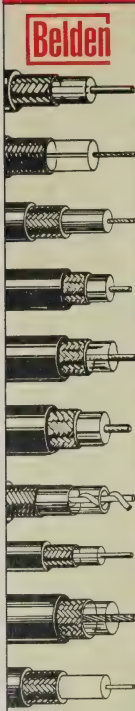
GROUNDING PANEL

CU-SPGP A .062" thick copper plate mounted on a melamine covered particle board. For mounting protectors and establishing a single grounding point for all station equipment. Comes with concrete anchors, mounting screws, two rolls of 10 ft. x 1-1/2 inch copper grounding strap and two copper sandwich bars for the strap. 18" w x 12" h, 16" on center mount... **\$69⁹⁵**



LOW INDUCTANCE COPPER STRAP

Strap has an advantage over wire when used for grounds because it has lower inductance and cannot be fused open by lightning. 1-1/2 inch strap has a lower inductance than #2 stranded wire. Easy to cut and solder, usable above or in-ground, 26 AWG thickness. Available in 1-1/2, 3 and 6 inch widths; 25, 50, 75 or 100 ft. rolls. **See Price List**



Belden number	RG-type	Dia. (in.)	Center conductor	Insulation type	Shield coverage	Jacket type	Imp. (Ω)	Vel. factor	Loss/100' 100 MHz
9201	58/U	.193	#20 solid copper	Solid polyethylene	78% bare copper	PVC	53	66%	4.5 dB
8240	58/U	.193	#20 solid tinned cop.	Solid polyethylene	95% tinned copper	PVC	53.5	66%	3.8 dB
8259	58A/U	.193	#20 stranded tinned cop.	Solid polyethylene	96% tinned copper	PVC	50	66%	4.9 dB
8219	58C/U	.193	#20 stranded tinned cop.	Cellular polyethylene	96% tinned copper	PVC	50	78%	4.5 dB
8262	58/CU	.193	#20 stranded tinned cop.	Solid polyethylene	95% tinned copper	Non-contam. PVC	50	66%	4.9 dB
9258	8/X	.242	#16 stranded copper	Cellular polyethylene	95% bare copper	PVC	50	78%	3.7 dB
8237	8/U	.405	#13 stranded copper	Solid polyethylene	97% bare copper	PVC	52	66%	1.9 dB
8214	8/U	.405	#11 stranded copper	Cellular polyethylene	97% bare copper	PVC	50	78%	1.8 dB
9913	8/U	.405	#10 solid copper	Semi-solid polyethylene	100% foil + 88% braid	PVC	50	84%	1.3 dB
9913F*	8/U	.405	#10 stranded copper	Cellular polyethylene	100% foil + 90% braid	PVC	50	83%	1.3 dB
*High-Flex									
9251	8A/U	.405	#13 stranded copper	Solid polyethylene	97% bare copper	Non-contam. PVC	52	66%	2.2 dB
8267	213/U	.405	#13 stranded copper	Solid polyethylene	97% bare copper	Non-contam. PVC	50	66%	2.1 dB
8241	59/U	.240	#22 solid copper	Solid polyethylene	95% bare copper	PVC	73	66%	3.4 dB
8238	11/U	.405	#18 stranded tinned cop.	Solid polyethylene	97% bare copper	PVC	75	66%	2.0 dB
8213	11/U	.405	#14 solid copper	Cellular polyethylene	95% bare copper	PVC	75	78%	1.5 dB

Rotor Cable

8448 Standard duty, 8 wire. Consists of 6-#22 and 2-#18 tinned copper conductors. PVC insulation and PVC jacket. For run up to 100 ft.

9405 Heavy duty, 8 wire. Consists of 6-#18 and 2-#16 tinned copper conductors. PVC insulation and PVC jacket. For runs over 100 ft.

8484 Standard duty, 4 wire. Consists of 4-#20 tinned copper conductors. PVC insulation & jacket.

Antenna & Ground Wire

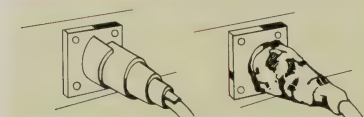
8000 #16 AWG (7x22), stranded bare copper-covered steel Antenna Wire.

8018 #8 AWG (solid), soft annealed aluminum Ground Wire - multiples of 50 ft.

See
BELDEN in
the Price
List



Hand Moldable Plastic
for Antenna
Component Protection



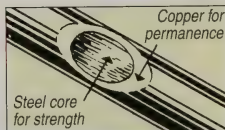
Coax Seal quickly and effectively seals all types of coaxial fittings; baluns; antenna parts and connectors of all shapes - adheres tightly to vinyl and polyvinyl coax outer jackets. Simply wrap it on like regular tape, then mold it to any shape. It stays flexible and sealed at any temperature for years to resist moisture penetration and deterioration. Its permanent flexibility makes it possible to remove and re-install fittings, then re-seal by re-forming the same material. Non-toxic, non-contaminating. Roll, 1/2" wide x 60" **UNV104 \$2⁹⁵**

penetrox® A Electrical Joint Compound

A special anti-seizing compound for all bare aluminum to aluminum and aluminum to copper connections, and also as a thread lubricant. Apply to mating pieces of antenna components, tubing, etc. before assembly to provide a non-corrosive, low resistance, airtight seal. Makes disassembly of tubing & bolts at later date a breeze. 4 oz. .. **\$12⁹⁵**

**CASTLE RIDGE
PRODUCTS, INC**
COPPERWELD®
Antenna Wire

FORGE-WELDED
makes the two metals
inseparable!



Solid bare copper-over-steel wire - the Best for antennas

Very strong, steel core has very little stretch and long service life. Copper covering provides low RF resistance, easy to solder. Choice of 12, 14 or 18 gauge, 100, 150, 250, 500 or 1000 ft. rolls.

AN-122 100 ft. #12. **\$24⁹⁵** **AN-143** 150 ft. #14. **\$24⁹⁵**

AN-123 150 ft. #12. **\$29⁹⁵** **AN-144** 250 ft. #14. **\$32⁹⁵**

AN-124 250 ft. #12. **\$49⁹⁵** **AN-146** 500 ft. #14. **\$56⁹⁵**

AN-126 500 ft. #12. **\$84⁹⁵** **AN-148** 1000 ft. #14. **\$99⁹⁵**

AN-128 1000 ft. #12. **\$139⁹⁵** **AN-181** 250 ft. #18. **\$14⁹⁵**

AN-142 100 ft. #14. **\$19⁹⁵** **AN-182** 500 ft. #18. **\$24⁹⁵**

STUF Dielectric Waterproofing Filler

- High purity macroscopic foam, dielectrically simulates the coaxial cable core
- Just fill connector and tighten. Filler hydraulically channels into all connector voids & ports of moisture entry.
- Non-hardening, easy removal.
- Contains no silicones, or other additives to harm coax cable material.





PolyPhaser Corporation's coaxial impulse suppressors are a unique line of patented products. Hermetically-sealed voltage sensitive gas tubes are used with additional components to assure that surge voltages and currents formed differentially on the coax are not conducted to the equipment input. There is no dc continuity from center pin to center pin on our dc blocked protectors.

Other gas tube protectors have dc continuity through their center pins and share the energy with the equipment before the gas tube turns on. Quarter wave stub protectors are also dc coupled devices. There is dc continuity between their center pins and the equipment input.

A PolyPhaser dc blocked protector only lets through our rated specification (low milli-, or microjoules). Peak voltage let-through is also significantly less than dc continuity protectors. PolyPhaser's measured let-through energy and voltage is the industry's lowest.

- Multi-strike capability with low-strike throughput energy
- Aluminum enclosure
- VSWR: ≤ 1.1 over its frequency range

● FLANGE MOUNT

IS-50UX-C0 Frequency Range: 1.5MHz to 400MHz;
Max. Power: HF 2kW, VHF 375W, UHF 125W

IS-50UX-C1 Frequency Range: 50MHz to 700MHz;
Max. Power: VHF 375W, UHF 125W

IS-50NX-C2 Frequency Range: 125MHz to 1000MHz;
Max. Power: VHF 375W, UHF (low) 125W,
800MHz to 1GHz 50W. Type N connectors

● BULKHEAD MOUNT

IS-B50LU-C0 Frequency Range: 1.5MHz to 400MHz;
Max. Power HF 2kW, VHF 375W, UHF 125W

IS-B50LU-C1 Frequency Range: 50MHz to 700MHz;
Max. Power VHF 375W, UHF 125W

IS-B50LN-C2 Frequency Range: 125MHz to 1000MHz; Max.
Power VHF 375W, UHF (low) 125W, 800MHz to
1GHz 50W. Type N connectors

● ROTOR CONTROL PROTECTOR

IS-RCT Provides protection for rotor controllers, motors, control box and other nearby equipment. EMP rated faster than other gas tubes with mounting stud. 7.5" h x 3.25" w x 2.5" d.

● IN-LINE PHONE LINE PROTECTOR

IS-SPTL Multi-stage protection, with large bandwidth and fast response time. EMP rated. For telephone trunk lines — handles standard ring voltages to 105Vrms. Handles surges up to 36kA.

● POWER LINE EXTENSION PROTECTOR

In-line, multi-stage EMP rated protectors provide multi-strike power line protection, filtering, and proper grounding when equipment use requires an extension cord. Two outlets, master on/off switch, circuit breaker for added protection. All aluminum-grounded enclosure. 4.25" wide.

IS-PLDO-120-15A 15' cord, 120V @ 15A

IS-PLDO-120-20A 6' cord, 120V @ 20A

● GROUNDING PANEL

CU-SPGP A .062" thick copper plate mounted on a painted 1/2" plywood backing. Mounting protectors & a single ground point established for station equipment. Comes with concrete anchors, all mounting screws, 10' of 1.5" copper grounding strap, 2 brass sandwich plates, and joint compound. 18" w x 12" h; 16" d center mount.

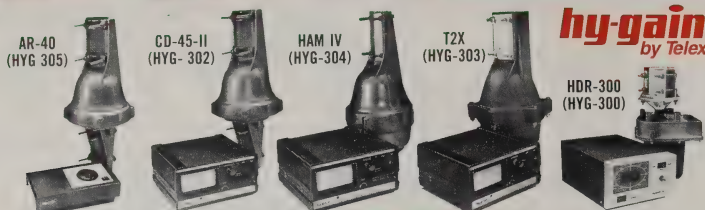
● LOW INDUCTANCE COPPER STRAP

Copper strap has an advantage over wire when used for grounds, as it has lower inductance, and cannot be fused open by lightning. For example: 1.25" strap has a lower inductance than #2.0 stranded wire. It's easy to cut, solder, etc. Usable above or in-ground applications. 26 AWG thickness (0.0159"). Available in 1.5, 3 & 6 inch widths, and 25, 50, 75 or 100 foot rolls.

PolyPhaser
CORPORATION

A SMITHS INDUSTRIES COMPANY

TOWERS & ROTATORS



AR-40 Lightweight • For large TV/FM & smaller Ham Antennas up to 3.0 sq. ft. windload area mounted in-tower, or 1.5 sq. ft. mast mounted with supplied lower support bracket. Rotor: 17 1/2" h x 8" dia., 12 ball bearings, disc brake. Accepts mast sizes up to 2 1/2" dia. Automatic, silent control box - dial & touch for desired direction. Use Belden 8-wire control cable. 14 lbs **\$239⁹⁵**

CD-45-II Medium Duty • For antennas up to 8.5 sq. ft. windload area mounted in-tower, or 5 sq. ft. mast mounted with supplied lower support. Rotor: 17 1/2" h x 8" diameter, 48 ball bearings, disc brake. Mast sizes up to 2 1/2" dia. Illuminated directional indicator, snap action rotation switches, disc brake. Meter face reversible for N or S center. Use Belden 8-wire cable. 20 lbs **\$339⁹⁵**

HAM IV Heavy Duty • For medium-sized antennas with up to 15 sq. ft. windload area mounted in-tower, or 7.5 sq. ft. mast mounted with optional lower bracket. Rotor: 13 1/2" h x 8" diameter, 98 ball bearings, electric locking steel wedge brake. Accepts mast sizes up to 2 1/2" diameter. Illuminated indicator, separate snap-action brake & rotation switches, N or S center scale. Use Belden 8-wire rotor cable. 24 lbs **\$449⁹⁵**

HAM V the IV w/DCU-1 control box.. (HYG 307) **\$769⁹⁵**

T2X Tailtwister Extra Heavy Duty • For large antennas up to 20 sq. ft. windload mounted in-tower, or 10 sq. ft. mast mounted with optional lower support bracket. Rugged casting - 14 1/2" x 9 1/2" dia., 138 ball bearings, electric locking steel brake. Mast sizes up to 2 1/2" dia. Illuminated directional indicator, separate snap action brake and rotation control switches, North or South center scale. Belden 8-wire cable. 28 lbs. **\$539⁹⁵**

HDR-300/A Deluxe Extra Heavy Duty • In tower mount - for large antenna arrays up to 25 sq. ft. windload. Rotor: 7" x 9" x 10" h, 138 ball bearings, solenoid operated locking brake. Masts up to 3" diameter. Digital directional indicator. Separate brake and rotation control. Use Belden 8-wire control cable. 55 lbs... **\$1049⁹⁵**



DCU-1 Digital Rotor Control Digital and Analog displays with 6 presets. Preprogram your favorite beam headings! One-degree accuracy. RS-232 input with for computer control. For T2X or Ham IV (HYG 306) **\$539⁹⁵**

More Hy-Gain Products - See the Price List



U-105 Antenna Rotator featuring a one-piece cast aluminum housing, large bearing surfaces, reinforced mast support and a ball bearing for the vertical load. Precision-cut, hardened steel drive train and high torque-well equipped to handle small to medium VHF/UHF amateur & the largest TV & FM arrays. Control unit is smooth & quiet, synchronized with the drive by synchronous motors **\$69⁹⁵**

Rotation Range.....360° +5°-0 Support Mast Size.....1 1/2" diameter
Rotation Time.....70 Seconds Control unit ... 7" w x 5 1/2" d x 2 1/2" h
Rotation Torque.....8 ft./lbs. Weight (Rotor + control)...10 lbs
Max. Vertical load.....100 lbs. Control cable (4-wire) Belden 8484

TB-105 Support Bearing for extra-sturdy installation when using the U-105 rotator. Relieves wear and tear on the drive unit imposed by wind loads. All ball bearing design, weather-tight seal. Installs on the support mast, above the U-105..... **\$18⁹⁵**



G-5400B Azimuth-Elevation Rotator For satellite, moonbounce, etc. where both horizontal and vertical rotation is required in a single unit. Full 180° rotation in 58 seconds; 360° azimuth rotation time: 50 seconds. Maximum wind load: 11 sq. ft. Handles 440 lbs of vertical load & masts from 2 - 2 1/2 inches. The control box has large dual meters which show separate azimuth and elevation indication with ±4% aiming accuracy. Uses Belden 8448 8-wire control cable..... **\$539⁹⁵**

G-500A 180° Elevation Rotor For satellites, moonbounce work, etc. Smooth, 180° elevation rotation time in 60 seconds. Maximum wind load: 12 sq. ft. Large meter with ±3% aiming accuracy. Accepts boom diameters from 1 1/4 to 1 3/4 inches. Uses Belden 8448 8-wire control cable..... **\$279⁹⁵**



More YAESU Rotators - See Price List & Index

ROHN®

Heavy Duty HDX-Series Towers

All steel with X-brace construction for strength that allows a free-standing configuration without guy wires at 70 mph windspeed with antennas up to 10 sq. ft. wind area and boom lengths not exceeding 10 ft. The galvanized steel provides an attractive and maintenance-free finish. The entire tower can be assembled on the ground and hinged up in to position with the optional hinged base, or built vertically, section by section. Supplied with BXB base stubs for concrete mounting, rotator plate, mast clamp and hardware. All makes of rotators can be installed on the rotator plate inside of the top section. Tubing furnished that can be held in place with the mast clamp on the top plate to act as a thrust sleeve for a 1-1/4 in. mast.

Model	Height	Sections	Windload @ 70 mph	Weight	PRICE
HBX-40/BXB-6	40 ft.	5	10 sq. ft.	276 lbs	\$445⁹⁵
HBX-48/BXB-7	48 ft.	6	10 sq. ft.	353 lbs	\$594⁹⁵
HBX-56/BXB-8	56 ft.	7	10 sq. ft.	444 lbs	\$745⁹⁵

Factory
Drop Ship

Heavier Capacity Duty HDBX-Series

Model	Height	Sections	Windload @ 70 mph	Weight	PRICE
HDBX-40/BXB-7	40 ft.	5	18 sq. ft.	330 lbs	\$556⁹⁵
HDBX-48/BXB-8	48 ft.	6	18 sq. ft.	422 lbs	\$742⁹⁵

Glen Martin Engineering

Featuring a selection of complete Aluminum Tower Packages, Roof-Top Tripods and the Hazer Antenna Trim System. Factory Drop Ship. Price includes 48-State Shipping.

U.S. TOWER

Self-supporting Steel Crank-up Towers
Three compact models: **TMM-series** •
Six standard models: **TX-series** • Five
heavy-duty models: **HDX-series** • Seven
tubular crank-up models: **MA-series**
Factory Drop Ship

YAESU

Antenna Rotators

7 models available with a range of windload ratings for almost any need.

See Price List & Index for more information on these Manufacturers' products



OREGON SCIENTIFIC NOAA/All Hazards Weather Radios

Monitors 24-hour weather forecasts & alerts • Scans/tunes all NOAA weather channels • Monitors the U.S. emergency alert system with automatic activation • Dual LED power/alert indicator • Digital clock & alarm w/snooze

WR-8800 Pocket-sized

- Ambient temperature display
- Freeze alert audible/visual warning
- LCD screen with backlighting
- Water-resistant case with compass
- Belt clip and built-in desktop stand with power supply • Uses 3 "AA" batteries • 2 1/2" w x 1 1/4" d x 6 1/2" h, 8 oz

\$59⁹⁵

WR-3300 Desktop/Bedside

- Operates on 3 "C" batteries or with included AC power adapter
- Large digital clock LCD display
- Wall mount or desktop use
- 5 1/4" x 4 1/4" w x 2 1/4" h, 6 oz
- Batteries are not included with these radios

\$49⁹⁵



UNIVERSAL FREE STANDING ALUMINUM TOWERS

**RUGGED • LIGHTWEIGHT
RUST FREE • EZ INSTALL**

Configurations available from 30-100 feet with various wind load selections to meet almost any application. Self-Supporting - no need for unsightly guy wires at rated load

Factory Drop-Ship

For more information see the Price List & Index

ROTATORS

HF, VHF, Satellite Antenna Rotators



G-2800SDX

The top-of-the-line rotator for extra heavy-duty antenna installations. Maximum antenna wind load, 34 sq. ft.

For the best choice in rotators, and the only rotators made by a major amateur radio manufacturer, ask for Yaesu! Weatherproof, and permanently lubricated for maintenance-free operation, Yaesu rotators are designed for smooth, quiet operation without noisy wedge brakes, and are compatible with most US-made antenna tower accessory shelves. These quality-built rotators are backed by a 1-Year Warranty. For full details and specifications, see your Yaesu dealer.

Our rotators keep you spinning.

Model	Application	Mast Size	Rotator Size	Pre-sets	Wind Load
G-450XL	Light/medium-duty	1 3/4 - 2 inches	12 1/2" H x 7 1/2" Dia.	No	10 Sq. Ft.
G-800X	Medium-duty	1 1/2 - 2 1/2 inches	12 1/2" H x 7 1/2" Dia.	No	17 Sq. Ft.
G-800SDX	Medium-duty	1 1/2 - 2 1/2 inches	12 1/2" H x 7 1/2" Dia.	Yes	17 Sq. Ft.
G-1000SDX	Heavy-duty	1 1/2 - 2 1/2 inches	12 1/2" H x 7 1/2" Dia.	Yes	23 Sq. Ft.
G-2800SDX	Extra Heavy-duty	1 7/8 - 2 1/2 inches	13 5/8" H x 8" Dia.	Yes	34 Sq. Ft.
G-5400B	Azimuth-Elevation Rotator combination	1 1/2 - 2 1/2 inches (Boom Dia. 1 1/4 - 1 5/8 in.)	Mounted together 12 1/2" H x 7 1/2" Dia.**	No	11 Sq. Ft.
G-500A	Elevation only	1 1/2 - 2 1/2 inches (Boom Dia. 1 1/4 - 1 5/8 in.)	10 1/2" H x 7 1/2" Dia.	No	12 Sq. Ft.

Accessories:

GC-038 Mast Clamp,
GC-048 Mast Clamp,
GS-050 Thrust Bearing,
GS-065 Thrust Bearing

YAESU

...leading the way.SM

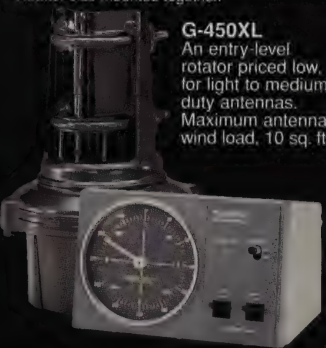
For the latest Yaesu news, hottest products, visit us on the Internet! <http://www.yaesu.com>

Rotators not shown: G-800S, G-800SDX, G-1000SDX

Call or write Yaesu for a free guide to help you select which rotator is best for your installation.

*Wind load ratings are valid when rotator is mounted in tower.

**Rotator size mounted together.



G-450XL

An entry-level rotator priced low, for light to medium duty antennas. Maximum antenna wind load, 10 sq. ft.

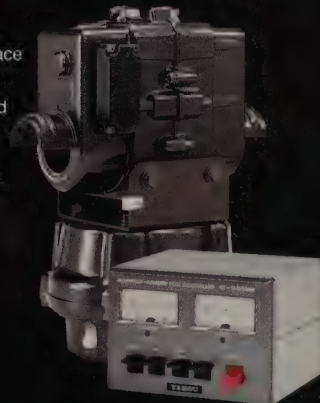
G-500A

Elevation rotator for space communication antennas. Maximum antenna wind load, 12 sq. ft.



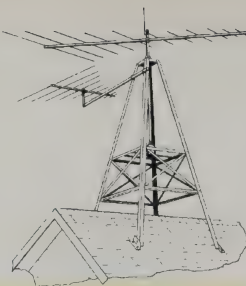
G-5400B

Azimuth-Elevation combination for space communication antennas. DIN connection provided for computer operation. Maximum antenna wind load, 11 sq. ft.



ROOF-TOP TOWERS

High Quality • Anodized Aluminum
Construction • Lightweight yet Extra Heavy Duty
• Will Not Rust / Stainless Steel Bolts • Ideal for
support of Ham Antennas • Weather Monitors,
Scanner & AMSAT Antennas, Telemetry



MODEL	Height	*D, inches	Base width	Max Ant. in sq. ft. @ 87 mph 100 mph 112 mph	Max. Ant. weight	Shipping weight	Price w/UPS
RT-424	4.5	34.75	24"	6 4.5 3.6	100 lbs.	20 lbs.	\$159.95
RT-832	8.0	43.75	32"	8 6 4.8	120 lbs.	36 lbs.	\$229.95
RT-936	9.0	43.75	36"	18 13.5 10.5	130 lbs.	78 lbs.	\$389.95
RT-1832	17.5	37.62	32"	12 9 7.2	110 lbs.	88 lbs.	\$524.95

*D=Distance from top surface to rotor mount

TOWERS & HAZER

You NEED the HAZER The Hazer is a unique tram that rides up & down the outside of your Martin or Rohn tower. Raise and lower your antennas by simply turning a winch. Hazer 2, 3, 4, 5 and 6 wrap around the tower and work best on 50 ft. towers. Hazer 7 incorporates it's own separate track.

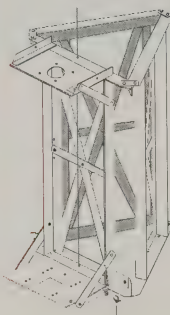
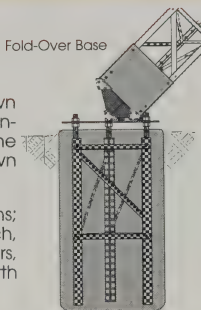
COMPLETE TOWER PACKAGE INCLUDES: 10-foot Tower Sections; Concrete footing; Hinged Base, for walk up erection; HAZER, winch, cable, etc; Kevlar Guy Wire Kit, turnbuckles, earth screw anchors, hardware; Premium Thrust Bearing, 10-foot Mast and 9 ft. Earth Ground Rod. Shipped motor freight **PREPAID**.

ORDER #	TOWER PACKAGE	TOTAL
M1330A	30 ft., 12 sq. ft., 87 MPH w/Hazer 5	\$1615.95
M1340A	40 ft., 12 sq. ft., 87 MPH w/Hazer 5	\$1832.95
M1840A	40 ft., 16 sq. ft., 87 MPH w/Hazer 6	\$2150.95
M1850A	50 ft., 16 sq. ft., 87 MPH w/Hazer 6	\$2410.95
M1860A	60 ft., 15 sq. ft., 87 MPH w/Hazer 7	\$3356.95
M1870A	70 ft., 15 sq. ft., 87 MPH w/Hazer 7	\$3660.95

HAZERS FOR ROHN 20/25 TOWERS

CAT #	MAX LOAD	WIND ABILITY	MATERIAL	PRICE
H-2	175 Lbs.	12 Sq. Ft.	Aluminum	\$359.95
H-3	150 Lbs.	8 Sq. Ft.	Aluminum	\$269.95
H-4	200 Lbs.	16 Sq. Ft.	Galv. Steel	\$344.95

Fold-Over Base



TOWER ACCESSORIES

ORDER#	DESCRIPTION	Price	ORDER#	DESCRIPTION	Price
M-1049	9' Galv. Steel Mast; 2" Dia.	\$58.95	TB-25	Thrust Bearing	\$89.95
MA-1049	9' Alum. Mast; 1.92" Dia.	\$68.95	MC-10	Mast Adapter-For Non-Rotating Setups	\$24.95
MA-2069	9' Alum. Mast; 2.37" Dia.	\$99.95	LB-3755	Lag Bolts	\$9.95
MA-5050	5' Alum. Mast; 1.31" Dia.	\$36.95	LR-8400	Lightning Rod Kit	\$148.95
MA-1050	5' Alum. Mast; 1.92" Dia.	\$55.95	*RA-6024	24" Side Arm	\$59.95
HP-3000	3000lbs Break Kevlar Cbl.	95¢ ft	*RA-6048	48" Side Arm	\$76.95
HP-4500	4500lbs Break Kevlar Cbl.	\$1.49 ft	KB-1000	57" Side Arm	\$81.95
NEW! Side Arm for H-2,3,4 H3101		\$44.95	ML-2500	Messenger Line Kit	\$69.95
BW-8001	Brake Winch for H-2,3,4	\$73.95	ES-60	Earth Screw Anchor 48"	\$25.95
HR-6040	Bearing Set for H-5, H-6	\$44.95	TB-3806	Turnbuckle 3/8 x 6	\$15.95
HR-2040	Roller Bearing Set for H-2,3,4	\$59.95			

* RA Sidearms are for roof-top towers and include hardware

PAR OMNIANGLE Horizontally Polarized Omnidirectional Antennas

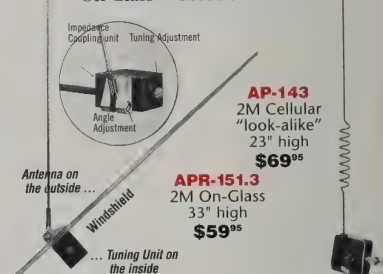


For 6 or 2m SSB mobile or fixed stations. Outperforms traditional halo and turnstile designs. It's considerably longer than a dipole and coupled with the unique shape, yields a horizontally polarized antenna whose pattern is within 0.8dB of being a perfect circle. Wide bandwidth and plastic shrouding virtually eliminates severe detuning due to moisture. Tuning is simple and no tools are required. Power handling: 160W.

Stacking two or four of these antennas results in an omni-directional pattern, low radiation angle with gain equivalent to medium sized Yagi antennas.

OA-144 Tuning range: 138 to 150MHz **\$54⁹⁵**
OA-50 Tuning range: 49.5 to 54MHz **\$63⁹⁵**

ANTENNA SPECIALISTS "On-Glass™" Mobile Antennas



AP-143
2M Cellular "look-alike"
23" high
\$69⁹⁵

APR-151.3
2M On-Glass
33" high
\$59⁹⁵

No holes to cut! The small Tuning Unit attaches to the glass inside of the vehicle, and couples capacitively thru-the-glass to the Radiating Element mounted on the outside. Installs with a easily removable adhesive. Includes adhesive, 15 ft. of coaxial cable with a PL-259 connector.

Power..... 100 watts Radiator..... Electrical 1/2-wave
Frequency Range..... 144-174 MHz Coupling Unit..... shunt feed, DC gnd (APR-151.3)
Whip Material..... Stainless steel, 138-150 MHz (AP-143) black DURA-COAT™ finish
Bandwidth..... 6 MHz, tunable Whip Length..... 33 in. (APR-151.3)
VSWR..... Less than 1.5:1 23 in. (AP-143)
Impedance..... 50Ω nominal Cable 15 ft. RG-58/U w/PL-259

KLM Fiberglass Masts

To provide proper horizontal boom insulation for OSCAR operation, KLM has two fiberglass masts: one 5 ft. the other 7 1/2 ft. Care should be taken in selecting the elevation rotator. The masts are too large for the Alliance U-110 which is sometimes used. The masts will work with the Yaesu rotators.

5ft. x 1 1/2" O.D. **\$34⁹⁵** • 7 1/2 ft. x 1 1/2" O.D. **\$45⁹⁵**



synthetic textiles, inc.

BLACK DACRON®
POLYESTER ANTENNA ROPE

- UV-PROTECTED • HIGH ABRASION RESISTANCE
- REQUIRES NO EXPENSIVE POTTING HEADS
- EZ TO CUT • 100 ft. 3/8" **\$6⁹⁵** - 350 ft. 1/2" **\$39⁹⁵**

POLYPHASER

Low Inductance Copper Strap

Copper strap is much better than wire when used for a ground path because of its lower inductance. For example: 1.5" wide strap has a lower inductance than heavy #2.0 stranded wire. Easy to cut, solder, etc. Ideal for serious grounding applications around the shack and in marine installations!

Available in 1/2, 3/8 & 6 inch widths and 25, 50, 75 or 100 foot rolls

See POLYPHASER in the Price List



Check out our full line of accessories including: Tower Motor Drives
5 ft. to 20 ft. Antenna Masts • 20 ft. Chromolly Masts • Thrust Bearings • Mast
Raising Fixtures • Rotating bases • Coax support arms • Limit Switch Packages

MA SERIES CRANK-UP TUBULAR TOWERS

Will handle 10 sq. ft. antennas at 50 MPH winds.

MODEL NO.	HEIGHT MAX.	HEIGHT MIN.	NUMBER SECTIONS	WT #	SECTION OD Top Bot.	BASE SIZE	AES PRICE
MA-40	40 ft.	21' 6"	2	242	3" sq. 4 1/2"	12"x12"x12".....	\$ 679.95
MA-550	55 ft.	22' 1"	3	435	3" sq. 6"	18"x18"x18".....	1069.95
MA-550MDP*	55 ft.	22' 1"	3	620	3" sq. 6"	3'x3'x5'.....	2932.95
MA-770	71 ft.	22' 10"	4	645	3" sq. 8"	3'x3'x6".....	2529.95
MA-770MDP*	71 ft.	22' 10"	4	880	3" sq. 8"	3'x3'x5 1/2".....	3999.95
MA-850MDP*	85 ft.	23' 6"	5	1128	3" sq. 10"	4'x4'x6".....	5391.95

*Standard bases and eave mounts included with all towers (except MA-770, 770-MDP and 850 MDP)

• MDP models complete with heavy-duty motor drive with positive pull down.

FREE STANDING HEAVY-DUTY CRANK-UP TOWERS

Will handle 18 sq. ft. antennas at 50 MPH winds.

MODEL NO.	HEIGHT MAX.	HEIGHT MIN.	NUMBER SECTIONS	WT #	SECTION OD Top Bot.	BASE SIZE	AES PRICE
TX-438	38 ft.	21' 6"	2	355	12 1/2" 15"	3'x3'x5'.....	\$1142.95
TX-455	55 ft.	21' 6"	3	670	12 1/2" 18"	3'x3'x6'.....	1399.95
TX-472	72 ft.	22' 8"	4	1040	12 1/2" 21 1/8"	4'x4'x7'.....	2832.95
TX-472MDP*	72 ft.	22' 8"	4	1210	12 1/2" 21 1/8"	4'x4'x7'.....	3899.95
TX-489	89 ft.	23' 4"	5	1590	12 1/2" 25 1/8"	4'x4'x7'.....	4927.95
TX-489MDPL*	89 ft.	23' 4"	5	1800	12 1/2" 25 1/8"	4'x4'x8 1/2".....	7390.95

*TX-472MDP includes heavy duty motor drive with positive pull down. *TX-489MDPL comes with heavy duty motor drive with dual level wind and positive pull down. MDPL models include fully operational limit switch packages.

FREE STANDING HEAVY-DUTY CRANK-UP TOWERS

Will handle 30 sq. ft. antennas at 50 MPH winds.

MODEL NO.	HEIGHT MAX.	HEIGHT MIN.	NUMBER SECTIONS	WT #	SECTION OD Top Bot.	BASE SIZE	AES PRICE
HDX-538	38 ft.	21'6"	2	600	15" 18"	3'x3'x6'.....	\$1477.95
HDX-555	55 ft.	22'	3	870	15" 21 1/8"	4'x4'x6'.....	2099.95
HDX-572	72 ft.	22'8"	4	1420	15" 25 5/8"	4'x4'x7'.....	4434.95
HDX-572MDPL*	72 ft.	22'8"	4	1600	15" 25 5/8"	4'x4'x8 1/2".....	6775.95
HDX-589MDPL*	89 ft.	23'8"	5	2440	15" 30 3/8"	5'x5'x8 1/2".....	8869.95
HDX-689MDPL*	89 ft.	23'8"	5	3450	18" 37 1/8"	5'x5'x9 1/2".....	17,135.95
HDX-5106MDPL*	106 ft.	24'8"	6	3700	15" 37 1/8"	5'x5'x9 1/2".....	18,647.95

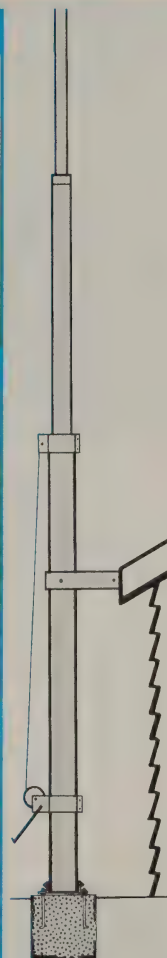
*Includes heavy-duty motor drives with dual level wind and positive pull down. MDLP models include fully operational limit switch packages. *HDX-689MDPL rated 60 sq. ft. of antenna at 50 mph winds. HDX-5106MDPL rated at 35 sq. ft. of antenna at 50 mph winds

FREE STANDING "LOW-PROFILE" COMPACT CRANK-UP TOWERS

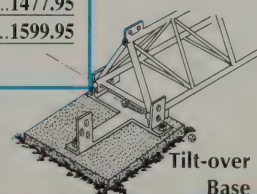
The SS will handle 18 sq. ft. and HD, 24 sq. ft. antennas at 50 MPH winds.

MODEL NO.	HEIGHT MAX.	HEIGHT MIN.	NUMBER SECTIONS	WT #	SECTION OD Top Bot.	BASE SIZE	AES PRICE
TMM-433SS*	33 ft.	11'4"	4	315	10" 18"	3'x3'x4'.....	\$1219.95
TMM-433HD	33 ft.	11'4"	4	400	12 1/2" 20 1/8"	3'x3'x5'.....	1477.95
TMM-541SS	41 ft.	12'	5	430	10' 20 1/8"	3'x3'x4 1/2".....	1599.95

* Rotators must be top mounted on SS models. Yaesu G800SDX will fit in and nest.

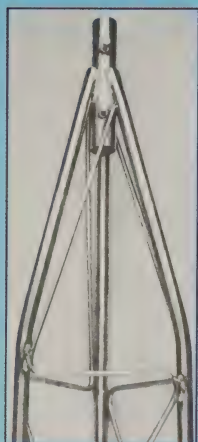


THE
PRICE LIST
HAS A
COMPLETE
LIST OF
ACCESSORIES

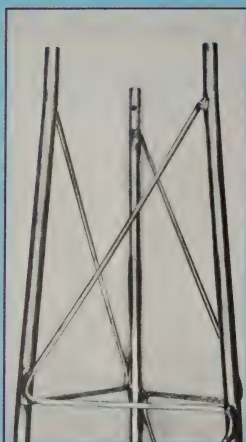


WRITE OR CALL FOR A COMPLETE US TOWER CATALOG - FREE!

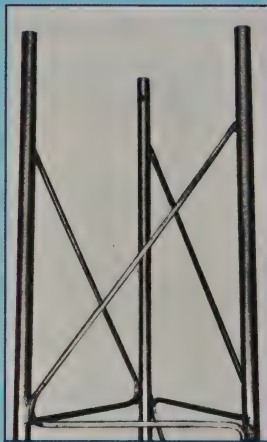
UNIVERSAL TOWERS



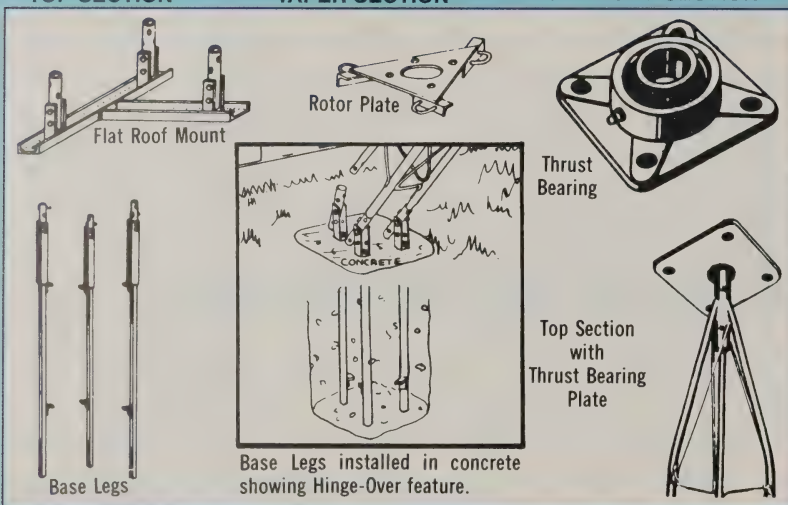
TOP SECTION



TAPER SECTION



STRAIGHT SECTION



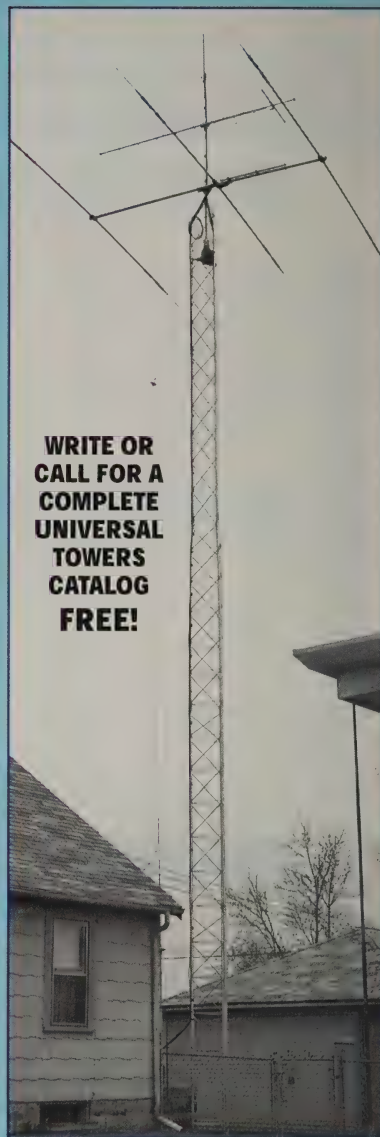
SECTIONAL DESIGNATIONS

Universal Aluminum Tower Sections are 10 ft. in length and are an equilateral triangular welded truss. They are designated as 11", 14", 18", 22", 26" & 30".

CHOOSING THE PROPER TOWER

Determine the projected area of the antenna that you intend to mount. This figure is often in the literature that comes with the antenna. Standard T.V. antennas are about 2 square feet in area; 6 & 10 meter beams and large T.V. antennas utilize 5 sq. ft. models; 20 & 40 meter beams utilize 9 sq. ft. models; large 20 & 40 meter beams or multiple antenna arrays utilize 18, 22, 26 sq. ft. models. Also take into consideration when using a rotator to add 1 sq. ft. plus 1 sq. ft. for the mast to whatever size antenna you intend to use.

Decide on the tower height that you want. Universal towers are made in 10 foot sections to give you many possible sizes and the ability to add sections later. Choose the tower model that is recommended for you. The model number is merely the wind loading followed by the height size. For example, if your antenna calculation resulted in a tower designed for five sq. ft. and you wish it to be 50 ft. high, the model you want is 5-50. See Price List for Configurations & Prices.



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CATALOG
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50 ft. UNIVERSAL Self-Supporting Aluminum Tower installed at the QTH of Ted Willett W9NHE. This set up made a Big difference — he really gets out!

BEFORE BUYING A TOWER

Consider the advantages of —

ALUMINUM

It's Strong, Lightweight, Rust Free and easy to assemble and erect.

UNIVERSAL offers 10 ft. sections in complete towers ranging from 30 to 100 ft. with a choice of wind load ratings and accessories to meet your specific needs.

Step Right Up...

Photograph by Jim Morrill

The Great Circus Train

makes its July run every year from Baraboo, WI, where the five Ringling Bros. began, to Milwaukee. There the 65 fully restored antique circus wagons, which were carried on the train's 19 double-length flatcars, are pulled by teams of draft horses in the Great Circus Parade the following Sunday. The wagons are from Baraboo's Circus World Museum, which is housed in the Ringling Bros.' original winter quarters. The five brothers started their circus in Baraboo in the late 19th century as a small mud show. However, in just a few years, it was on rails, taking the big show all around the United States. And with the acquisition of P.T. Barnum's show, it became *The Greatest Show On Earth*.

When the parade began in the 1960s, ham radio was aboard providing communications to the city on two meters and Navy-Marine Corps MARS linked repeaters. Don Evenson, K9JYK, was the first to operate Amateur Radio on the train using two-meter simplex, with information relayed by a 75-meter mobile operator chasing the train. Today, it is done by amateur

repeaters and cell telephones with equipment and operators provided by Milwaukee AREC Inc.

In the coach behind, a special event station, K9ZZ/Railroad Mobile, is controlled by three more hams, operating 20 and 40 meter SSB and two-meter simplex on 146.55 MHz simplex. The main rig in 1997 was a Kenwood TS-440S, courtesy of Bill Hommell, KA9QFJ, who was an operator aboard. The antenna, likely one of the most unique looking, was a dual-resonator Hustler C-clamped to a Caterpillar bulldozer carried on the first flatcar behind the last coach. Sherman Carr, W9NGT, provided his antenna expertise, which allowed the station to work anyone it could hear.

The 20 and 40 meter bands were not very cooperative in 1997, but the station still managed a total of more than 200 contacts, which were commemorated with full-color certificates furnished by Amateur Electronic Supply.

During a test on July 6, the first QSO was with LZ1QI, Petko, in Sofia, Bulgaria; but by the next day propagation had taken a turn for the worse. All things considered, the station did fairly well and the operators looking forward to future operations from The Great Circus Train.

For more information on the Great Circus Train visit the Circus World Museum in Baraboo or check it out on the Web at www.circusparade.com

Bike-mobiling for MS

Tom Allen
N7GBJ

Last September I had the opportunity to participate in a 2-day bicycle ride to benefit the National Multiple Sclerosis Society. The ride started in Newport Beach, California and ended at Mission Bay, San Diego. The route covered 150 miles over varying terrain.

I was sponsored and equipped by Premier Communications, with an ADI AT-600 Dual Band HT, a Premier SPM-500 Throat Mic and a RD-8 Dual Band Antenna. I also used an Icom NCP-1 Chest Pouch. During the ride I made approximately 15-20 contacts on local repeaters while pedaling along the California coastline. Several Hams were surprised that I was bicycle-mobile, not realizing how easy it is to do, virtually hands-free, with the right equipment. The local Hams told me I had a great signal into the repeaters.

Also along the route, I had the opportunity to meet and talk with several of the local Ham volunteers who provided communication support. Local Ham Radio Club members provide the majority of the communications for these types of rides across the country.

I have participated in the MS rides for 6 years and would like to say thank you to all of the volunteers who make it possible year after year.

by Tom Allen, N7GBJ, part of Amateur Electronic Supply's Las Vegas sales team.

4th annual SUPERfest

AMATEUR ELECTRONIC SUPPLY LLC
MILWAUKEE, WI • APRIL 5-6 • 1996

Another great success:

- 35 Ham manufacturers
- 10 Local Ham clubs & organizations
- Over 1,200 attendees • Seminars
- Over 100 prizes

Here's a photo tribute to the manufacturers & others that made this year's SuperFest possible.



ADI/PREMIER • Jim Newcomb, N7MBA



ALINCO • K. Nakata, KE6RD; Evelyn Garrison, WS7A



ARRL • Bob Inderbitzen, NQ1R



ALPHA DELTA • Don Tyrrell, W8AD; Shan & Jim Burns, WB4ILP



At Alpha Delta seminar, Don shows new tilt-over mount



AMATEUR RADIO TRADER • Barbara Patterson, KF4MVB



AMSAT • Gary Bargholz, N9UUR



BADGER STATE SMOKE SIGNALS • Ken Ebner, K9EN



CQ MAGAZINE • Arnie Sposato, N2IQO (right) with Bob Hell



CHEROKEE • Greg Cichy, NP2GQ (left)



CUSHCRAFT • Art Hambleton, K1ART



NGC/COMET • Mick Stwertink, KB6JVT; Jim Einwaller



DIAMOND ANTENNA/RF PARTS • Merit Arnold, W6NQ



GLEN MARTIN • Gary Martin, WBOWMQ (left); Tatum Martin



HAL • Mike Broga, W9KVF (center); Joe Wittmer, KB9SI2



HEIL SOUND • Bob Heil, K9EID (right)



ICOM • SuperFesters' checking out the ICOM Goodies!



KACHINA • Aubrey Stewart, W6PDG (left)



KANTRONICS • Phil Anderson, WØXI (left)



KENWOOD • Leo Fahmie, KJ6HI (left)



LARSEN • Dave Barquist, K9PAK (left)



MFJ • Darrell Fason, KB5VKY



MFJ/AMERITRON • Feeling the Power!



MFJ/MIRAGE • Richard Stubbs, KC5NSZ (left)



MFJ/VECTRONICS • Nice accessory line!



MAHA • Charles Chueh, KF6PXW (left); Robert Syms, KO6ZL



POLYPHASER • Dave Barquist, K9PAK (left)



SGC • Pierre Goral, K17UA (left); Jeff Halliburton, WA7JH



STANDARD • Mark Dziekan, KG9MX (left)



TIMEWAVE TECHNOLOGY • Al Clark (left)



UNIFIED MICROSYSTEMS • Gary Sutcliffe, W9XT (center)



VALOR • Bob White (right)



W5YI/ WEST • Gordon West, WB6NOA (right)



YAESU • Rico Burgos, KC6FMM (ctr); Neil Sims, N5OC (rt)



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SuperFest participation from 10 local srea clubs and organizations



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ICOM - Gary, KA9YTB



KENWOOD - Steve, N9SO



EVERYTHING FOR SHORTWAVE - Jared, KB9LTV



EVERYTHING FOR SCANNING - Steve, N9SO



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ABREVIACIONES IMPORTANTES

AMP	Amplificador
ANT	Antena
AT	Acoplador automatico de antena
BATT	Batería
BKT	Bracket de montura
BPR	Guarda choque
CGR	Cargador
CIG	Conector cigarillo
CNTR	Contador
DB	Decibeles
DLX	Lujo
DPLX	Duplexador
EL	Elemento
FREQ	Frecuencia
GND	Tierra
GTR	Labio de ventana
HT	Radio de mano
HVY	Pesado
KYR	Llave
MA	Millamperes
MAG	Magnetico
MAINT	Mantenimiento
MIC	Microfono
MT	Montura
MTG	Montura
NMO	Montura Motorola
PROG	Programable
PS	Fuente de poder
PWR	Poder
RCVR	Receptor
REM	Remoto
SENS	Sensitividad
SPKR	Bocina
SPLX	Simplex
SYS	Sistema
TTP	Teclado de botones
VOL	Volumen
W/	Con
WPM	Palabras por minuto
XCVR	Transceptor

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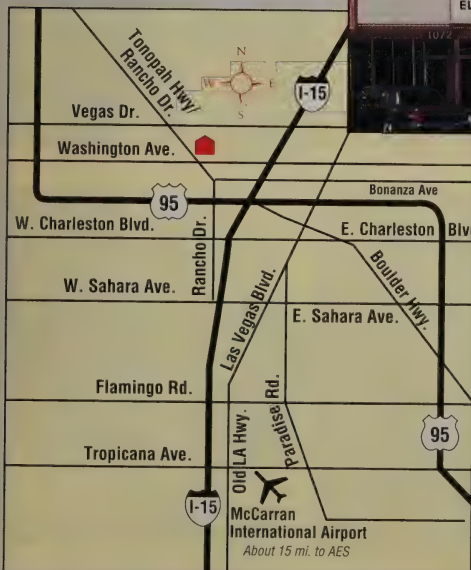
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JIM W1RO



LUKE KK7BW



MEL N6SJQ



SQUEAK AD7K
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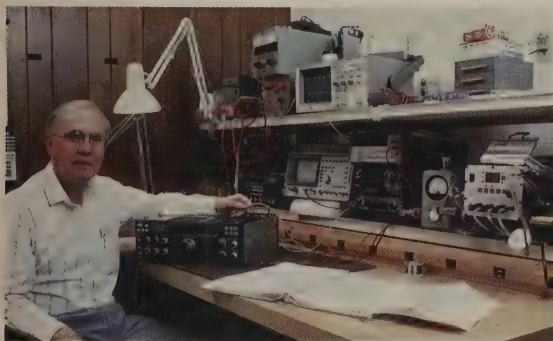
TERRY



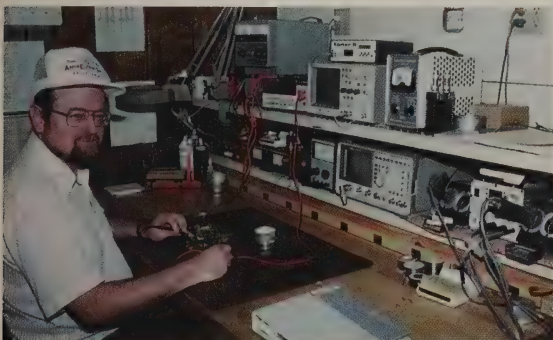
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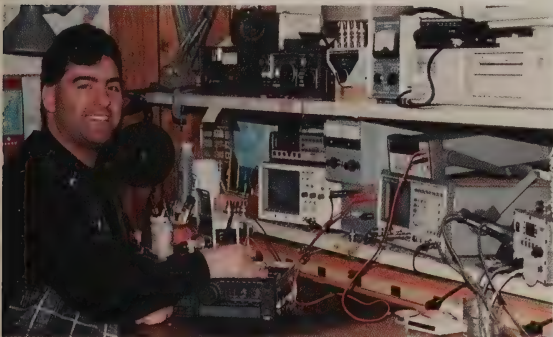
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MILES, K9HMQ Milwaukee



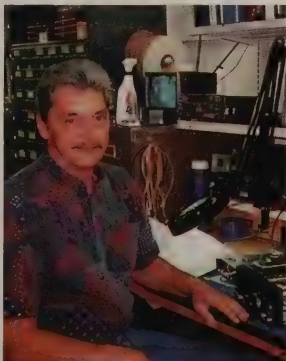
BILL, WB7SAJ Milwaukee



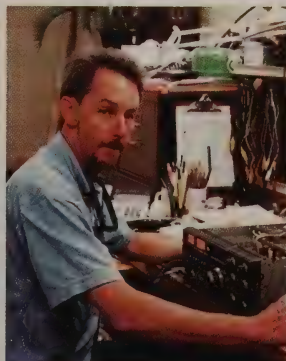
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JOHN, WA8PKB Wickliffe



GIL, K4ISK Orlando



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TECHNICIANS

We have 7 full-time and 4 part-time technicians. Three are shown in their shops in Milwaukee. Also pictured are: John, WA8PKB in Wickliffe, OH; Gil, K4ISK & STUART, N4IPX in Orlando, FL and Bob, KG7D in Las Vegas, NV.

EXPERIENCE

Our technicians are all Factory-Trained on the major brands (ALINCO, ICOM, KENWOOD, YAESU) and others. They have more than 70 years of cumulative experience in the ham service field and are FCC and NABER certified.

WE'RE EQUIPPED TO DO THE JOB

Each shop uses a state-of-the-art Hewlett Packard 8920A test set, which replaces several pieces of conventional test equipment. It combines twenty-two different instruments including a spectrum analyzer, tracking generator, digital scope, distortion and SINAD meter, all mode signal generator, frequency counter and more! It's highly stable, very accurate and helps speed repairs because it's I-BASIC computer allows the technicians to store custom test parameters for equipment that they frequently service. We also use H-P's digital scopes and DVM's, plus we have the latest in high-tech soldering stations for accurate and time-saving work on the latest delicate surface mount technology.

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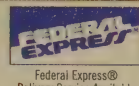
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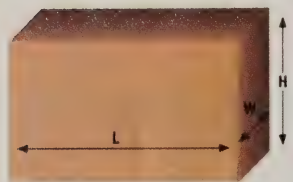
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FINAL BALANCE DUE (Line 10) to be paid by:															LINE 1 —																													
<p>We accept I.M.P.A.C.® Government Credit Cards</p> <div style="display: flex; justify-content: space-around; align-items: center;"> </div>															<p>Total Amount of Order \$</p>																													
<div style="display: flex; justify-content: space-between;"> <div style="width: 40%;"> <table border="1" style="width: 100%; height: 40px; border-collapse: collapse;"> <tr> <td style="width: 12.5%; height: 20px;"></td> <td style="width: 12.5%; height: 20px;"></td> <td style="width: 12.5%; height: 20px;"></td> <td style="width: 12.5%; height: 20px;"></td> <td style="width: 12.5%; height: 20px;"></td> <td style="width: 12.5%; height: 20px;"></td> <td style="width: 12.5%; height: 20px;"></td> <td style="width: 12.5%; height: 20px;"></td> <td style="width: 12.5%; height: 20px;"></td> <td style="width: 12.5%; height: 20px;"></td> <td style="width: 12.5%; height: 20px;"></td> <td style="width: 12.5%; height: 20px;"></td> <td style="width: 12.5%; height: 20px;"></td> <td style="width: 12.5%; height: 20px;"></td> <td style="width: 12.5%; height: 20px;"></td> </tr> </table> <p>Account Number</p> </div> <div style="width: 60%;"> <p>Cardholder's Name _____ Card Expires _____</p> <p>Cardholder's Signature _____ Date _____</p> </div> </div>																														<p>LINE 2 — Subtract TRADE-IN Allowance (if any) \$</p> <p>Enclose mail quotation or reference telephone quote & list Trade-in items.</p>														
<p><input type="checkbox"/> CHECK OR MONEY ORDER DO NOT MAIL CURRENCY. Send a Bank Check or Money Order. A Personal Check may delay shipping until it clears our bank. Please attach your remittance to the top of this order blank.</p> <p><input type="checkbox"/> COD Total cost of Merchandise, Shipping charges & \$6.50 COD fee per package collected upon delivery. <i>Only Cash or Certified Checks are accepted.</i></p>															<p>IMPORTANT! Persons having a Trade-in must check one of the choices in the box at the lower left of this Order Blank.</p>																													
<p>MINIMUM \$20.00 COD ORDER – NO AIR OR PARCEL POST COD's</p> <p style="color: red; text-align: center;">If you have a TRADE-IN — CHECK one of the following:</p>															<p>LINE 3 — Shipping Charges (see METHODS, and below) +</p> <p style="text-align: center; font-size: small;">Shipping Charges are taxable in Wisconsin, Florida & Nevada</p>																													
<p><input type="checkbox"/> Hold this order until you receive and approve my trade-in.</p> <p><input type="checkbox"/> Payment-in-full enclosed. Refund allowance when my trade-in is received and approved.</p> <p><input type="checkbox"/> Charge the FULL AMOUNT of my order to my Charge Card and Credit my trade-in allowance when my trade-in is received and approved.</p>															<p>LINE 4 — Sales Tax: <input type="checkbox"/> WI- 5.6%, <input type="checkbox"/> FL- 6%, <input type="checkbox"/> NV- 7%, <input type="checkbox"/> OH- 5.75% +</p> <p style="text-align: center; font-size: small;">For Ohio & Nevada figure tax from LINE 1 (before trade-in allowance)</p>																													
															<p>LINE 5 — Subtract here: AES Refund Checks, Gift Certificates or Manufacturer's Coupons (if any) -</p>																													
															<p>LINE 6 — Balance \$</p>																													
															<p>LINE 7 — Due AES from previous order (if any) +</p>																													
															<p>LINE 8 — Total Amount Due \$</p>																													
															<p>LINE 9 — Amount Enclosed -</p>																													
															<p>LINE 10 — Final Balance Due (if any) \$</p>																													

UPS Ground *flat-rate* Shipping Charges (48-STATES):

Orders up to \$100.00 – **\$4⁹⁵** • \$100.01 to \$500.00 – **\$9⁹⁵** • \$500.01 to \$1499.99 – **\$14⁹⁵** • \$1500.00 & Up – **PREPAID by AES**
The flat-rate is not applicable to the faster UPS Shipping Methods shown on reverse side or to Truck or Drop Shipments from manufacturers.

Importance of Proper Packing



$$\frac{L \times W \times H}{194} = \text{Dimensional Weight}$$

Packing

When returning heavy, delicate, and expensive equipment, it must be carefully packed in order to avoid damage caused by normal transportation dynamics. In other words, if you put your FT-1000, TS-850 or IC-751 in a box with little or no packing beneath it, chances are it will sustain some damage. When contents of packages are damaged, claims will be paid only if the carton and packing meet standards set in the International Safe Transit Association Procedure 1 and 1-A. These standards simply state that cartons and packing should provide reasonable protection to their contents. Ideally, contents should be suspended in the center of the carton by the packing material, no less than three inches on all sides for heavy items. For items heavier than 20 pounds, three inches of foam or crumpled paper should be used instead of polystyrene edge protectors.

Include Information

When you send your well-packed parcel to AES for repair, return or trade-in, be sure to include a letter inside the package. Do not reply on information written or taped on the outside of the carton. This information can be destroyed by moisture or abrasion. In the letter, put your call, name, address, phone and reason for return. You may also want to include your e-mail address and times you can be reached.

Dim Weight

When calculating the cost of air shipments, whether Fed-Ex, UPS or other carrier, remember that they use dimensional weight. Dim weights are used to insure adequate revenues per cubic foot of cargo plane space. The formula used to calculate dimensional weight is: L x W x H divided by 194. This means a 12" x 13" x 16" box that weighs six pounds will be sent at the twelve pound rate when an air service is used.

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- Rechargeable Battery

Power Output

- Auxiliary power output socket (3V, 350mA)

Performance

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- Patented HI-GAIN® lens

Flasher Unit

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Weather Resistant

- Durable EVA and monprene seals

Always Ready

- Instant light where and when you need it.

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- Rugged ABS, nylon & reinforced materials

Dimensions

- 7" x 10" x 5-1/2", 4 lb. 7 oz



BAYFPSL
\$69⁹⁵

See p. 33 for BayGen Self-powered Radios

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KMOX-CBS (1120 kHz) is a 50,000W clear channel station heard in 44 states. Tune-in Bob on the last Wednesday of the month from 10:00 to 11:00 p.m. central time.



Jim White, KMØX and Bob Heil, K9EID

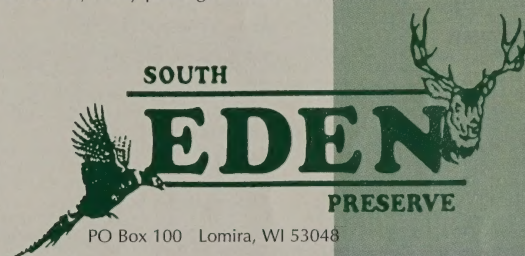
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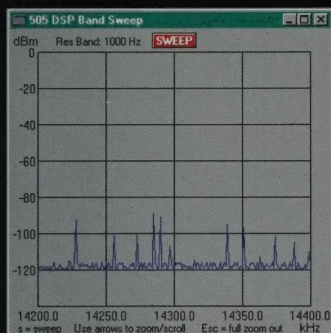
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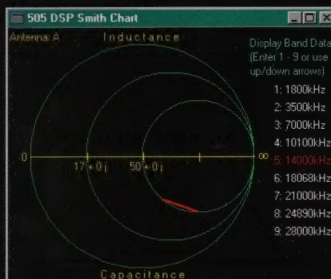
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Logbooks	Entries	Print	Help	Quit!
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002	01 Apr 97	17.53	14,187,000kHz	USB 100W 59+5
003	01 Apr 97	17.54	3,993,500kHz	LSB 100W 59+20
004	01 Apr 97	17.55	1,877,000kHz	LSB 100W 44
005	01 Apr 97	17.56	7,040,500kHz	CW 100W 569
006	01 Apr 97	17.58	14,012,000kHz	CW 100W 599

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the simple fact is, most other rigs don't have any of these features.

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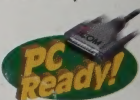


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